

To: Dr. Wetmore
January 31, 1923.

This is an
EXTRA COPY
Original
filed in
FHR-B
9444

JAN 31 1923

Mr. Seth E. Gordon,
Secretary, Game Commission,
Harrisburg, Pennsylvania.

Dear Mr. Gordon:

Your letter of January 26 has been received, and I am much interested in what you say about reports having reached you recently from various parts of the state indicating that there are really a larger number of halfbreed Mexican quail than indicated by the number obtained by Doctor Wetmore.

I agree with you that the investigation has not reached the stage which would justify its publication and intend to have it taken up on a more extensive scale in both Pennsylvania and Maryland, covering more of both states which should give us a far better basis on which to draw conclusions.

I shall be very glad indeed to have your friendly cooperation in this matter next fall.

Sincerely yours,

E. W. Nelson

Chief of Bureau.

EWN/one

January 19, 1923.

BI-3
Quail

Honorable Seth E. Gordon, Secretary,
State Game Commission,
Harrisburg, Pennsylvania.

Dear Mr. Gordon:

You are doubtless interested in the final outcome of the investigations by Dr. Alexander Wetmore of the Biological Survey into the status of introduced quail in Pennsylvania and Maryland. Final report on this matter has been deferred until the present moment to permit the accumulation of as much information on the subject as possible.

As you doubtless remember, Dr. Wetmore carried on field work in your company in eastern Pennsylvania from November 1 to 4, during the past fall. Later he worked from November 12 to 17 in the region south of Cambridge on the Eastern Shore of Maryland. Information in addition to that secured in the field has been taken from specimens forwarded since to the Biological Survey and from the observations of Mr. Talbot Denmead, Deputy Chief United States Game Warden, of the Biological Survey.

Studies of the present day quail of the East are complicated by the fact that these birds have been shipped about and introduced throughout the North and East for a considerable number of years. For example, quail were imported from Alabama and Georgia into eastern Massachusetts early in the '70's, while in Maryland introductions of quail have been made from Kansas and Alabama. The result of this has been to make it difficult to determine the exact characters of the native quail in the Eastern States, since southern and western birds differ often to a considerable degree from the original stock of the North and East. The importation of western and southern birds has so affected the quail of the present day, that in some cases it is difficult to distinguish specimens that may be supposed to carry blood from the Mexican stock of more recent importations. These points have all been borne in mind in the present studies and allocations of the specimens at hand have been made carefully, and so far as we can ascertain correctly.

As you will doubtless recall, specimens taken on the field trip mentioned in southern Pennsylvania came from eight distinct coveys, while birds in the possession of other hunters that Dr. Wetmore examined, or that have been forwarded since to Washington for examination, represent at least as many more bands of quail. Dr. Wetmore prepared fourteen quail as study skins, while the additional birds examined numbered about sixty or more in addition. Of this entire number, two were typical Mexican quail, adult birds more than a year old (as shown by their condition of molt, hardness of bones, etc.), apparently released individuals from the stock recently brought from Mexico. Seven others are evident hybrids between Mexican and native quail, and two more may or may not have a mixture of Mexican blood. The remainder appeared to be typical native quail.

During the work in Maryland, Dr. Wetmore handled ninety-two quail from seventeen distinct coveys; twenty of these birds were prepared as skins. In addition, Mr. Talbott Semmes has reported on many birds representing at least fifteen more coveys, while a few other specimens have been forwarded from various sources to the Biological Survey. Of the twenty skins mentioned (secured below Cambridge, Maryland), one an adult female is a typical Mexican quail, which, as in the case of the Mexican quail secured from Pennsylvania, is supposed to have been an individual of the imported stock. Eight other skins combined a somewhat grayish shade above with heavy markings below. These are supposed to carry a diluted strain of Mexican blood, but are not as well marked as the hybrids taken in Pennsylvania. It is possible that they are only quarter blood birds. All the remainder of the Maryland quail seen are supposed to represent the native stock. In a brief preliminary note, sent to you a few days after Dr. Wetmore's return from Pennsylvania, we stated that two of the quail secured might be Mexican quail bred in the region in which they were killed, i.e. in Pennsylvania. On subsequent more careful examination, however, these proved to be hybrids, so that you will note that in all this work no specimens have been seen that may be taken as representing Mexican quail, hatched in the area where the birds were killed.

According to your records, 31,600 Mexican quail have been introduced in Pennsylvania since 1916, about 25,000 of which were secured in 1921 and 1922. From figures furnished by Mr. E. Lee Le Compte, State Game Warden of Maryland, it appears that approximately 22,000 Mexican quail have been turned out in that State during the two years just past. When these figures are considered in connection with the small percentage

of birds examined this past fall that appear to be descended from the Mexican stock, it appears that a very large part of the introduced birds die or are killed without having bred; in other words, the number of Mexican quail that succeed in establishing themselves under the new conditions that they encounter seems to be relatively small. As a consequence, in Dr. Wetmore's opinion, the importation of quail from Mexico does not seem desirable, save into localities where the native birds have been wholly or nearly exterminated. Where there is a small stock of native quail left after excessive hunting or loss due to heavy winters, it is considered better policy to afford the native birds absolute protection for a period to enable them to recuperate their numbers. In several instances during the past fall, quail secured from areas where it was supposed that nothing but Mexican birds would be found, have proved to be natives in spite of the fact that Mexican stock had been released in the regions considered in some numbers. There have been numerous instances where over extensive areas quail have been nearly wiped out by severe winter weather, but have regained their former abundance after two or more years of absolute protection.

The investigations just outlined have proved interesting and instructive, and it is to be regretted that further time might not have been spent in looking into this matter.

With best wishes, I am

Very truly yours,

Chief of Bureau.

AW-bp

ACCOUNT OF
A. ZAPPONE,
DISBURSING CLERK

MAIL THIS VOUCHER
DIRECT TO YOUR
BUREAU.

Dept. Form No. 101.
Comptroller of Treasury, Feb. 24, 1921.

DUPLICATE.

VOUCHER No. 93665

U. S. DEPARTMENT OF AGRICULTURE.

DO NOT SIGN IN DUPLICATE

Biological Survey
(Bureau, Division, or Office.)

BUREAU No. _____

OFFICIAL STATION.

Washington, DC.
TEMPORARY STATION.

SCHEDULE OF FUNDS ADVANCED UNDER ACT OF JUNE 3, 1902 (32 STAT., 303),
AND VOUCHER FOR TRAVELING, STATION, AND FIELD EXPENSES, AND
FOR PER DIEM, PAID FROM FUNDS SO ADVANCED.

APPROPRIATION: _____

		AMOUNT.	
Amount due the United States per previous account	_____	35	31
Amount advanced to me since previous account	_____		0
TOTAL,	_____	35	31
Expenditures from funds advanced for traveling, station, and field expenses, and for payment of per diem allowance, as per itemized statement herein set forth, incurred in the discharge of official duty from <i>Oct. 31</i> , 1922, to <i>Nov. 4</i> , 1922, under written authorization from the Secretary of Agriculture, No. <i>8-Sec.</i> , dated <i>July 1</i> , 1922, a copy of which is on file in the Treasury Department.			
AMOUNT CLAIMED	_____	21	59
Balance now due the United States	_____	13	72

DUPLICATE

REFERENCE MEMORANDUM

This MEMORANDUM is for reference purposes only. The employee submitting the voucher should make above a literal transcript of the account before forwarding the voucher for settlement. DO NOT DETACH THIS DUPLICATE. It will be returned to you by the Disbursing Clerk with such notations as may be necessary.

Name *Alex Wetmore*
Official title *Assistant Biologist*
Address *Biological Survey*

MEMORANDUM OF ACTION TAKEN BY DISBURSING CLERK

Funds advanced by check No. *542898*, dated *August 18*, 1922, drawn on the Treasurer of the United States in favor of payee named above.
Differences as follows: *Suspensions*

20

Balance due the United States _____ 13 92

Kindly correct your record accordingly and enter this amount as due the United States at the head of your next expense account.

Respectfully,

DEC 8 - 1922

A. Zappone

Disbursing Clerk.

THE SURVEY

- 3 -

November, 1922.

From October 31 to November 4, Dr. Alexander Wetmore was in southern Pennsylvania studying the status of the Texas bobwhite, introduced locally in considerable numbers under the name of Mexican quail. The introduced birds seemed to have done well, and quail were as common as could be expected in a region where hunting is extensive. Specimens taken included some of the original native stock, as well as a number that are crosses between the native and introduced forms. The work was done in cooperation with the Secretary of the Pennsylvania Game Commission.

The Introduction and Present Status of Mexican Quail
in Pennsylvania.

Itinerary.

At noon on October 31, 1922, by previous appointment, I met Mr. Seth E. Gordon, Secretary of the Game Commission of Pennsylvania, in Harrisburg, Pa., and in company with Mr. Gordon, was occupied until November 4, in an investigation of the result of extensive introduction of bobwhites or quail of the form Colinus virginianus texanus, from northeastern Mexico into Pennsylvania. On the afternoon of October 31, we proceeded to McConnellsburg, in Fulton County, and on the day following, worked in a region near Big Cove Creek six miles south of the town mentioned. On November 2 we came east to the vicinity of Edenville, in Franklin County, and on November 3 and 4, we were occupied in an area east and north of Carlisle, in Cumberland County. The regions visited were those where Mexican quail had been introduced in numbers by the Game Commission. Attempt was made to find as many coveys of birds as possible, and to shoot two or three birds from each covey. All travel was performed in Mr. Gordon's auto at the expense of the Game Commission. On the evening of November 4, I returned to Washington.

Introduction of Quail.

According to information supplied by Mr. Gordon bobwhites from Mexico were first introduced in Pennsylvania in 1915. In that year a small number were brought in, but extensive introductions were not made until 1916. In all 31,600 birds have been imported into the State. About 25,000 of which were introduced in the two years past. These birds were purchased at prices ranging from \$15 to \$30 per dozen from Dr. Frank Kent, C. E. Brewster, Wm. J. Mackenmen, Wm. Learn, W. A. (Snake) King, and the American Mexican Bird and Animal Company (of Laredo). The stock secured was released in the southern half of the State in the area south of the irregular line indicated on the accompanying map. Winter climatic conditions in more northern sections are too severe to warrant introduction of foreign birds.

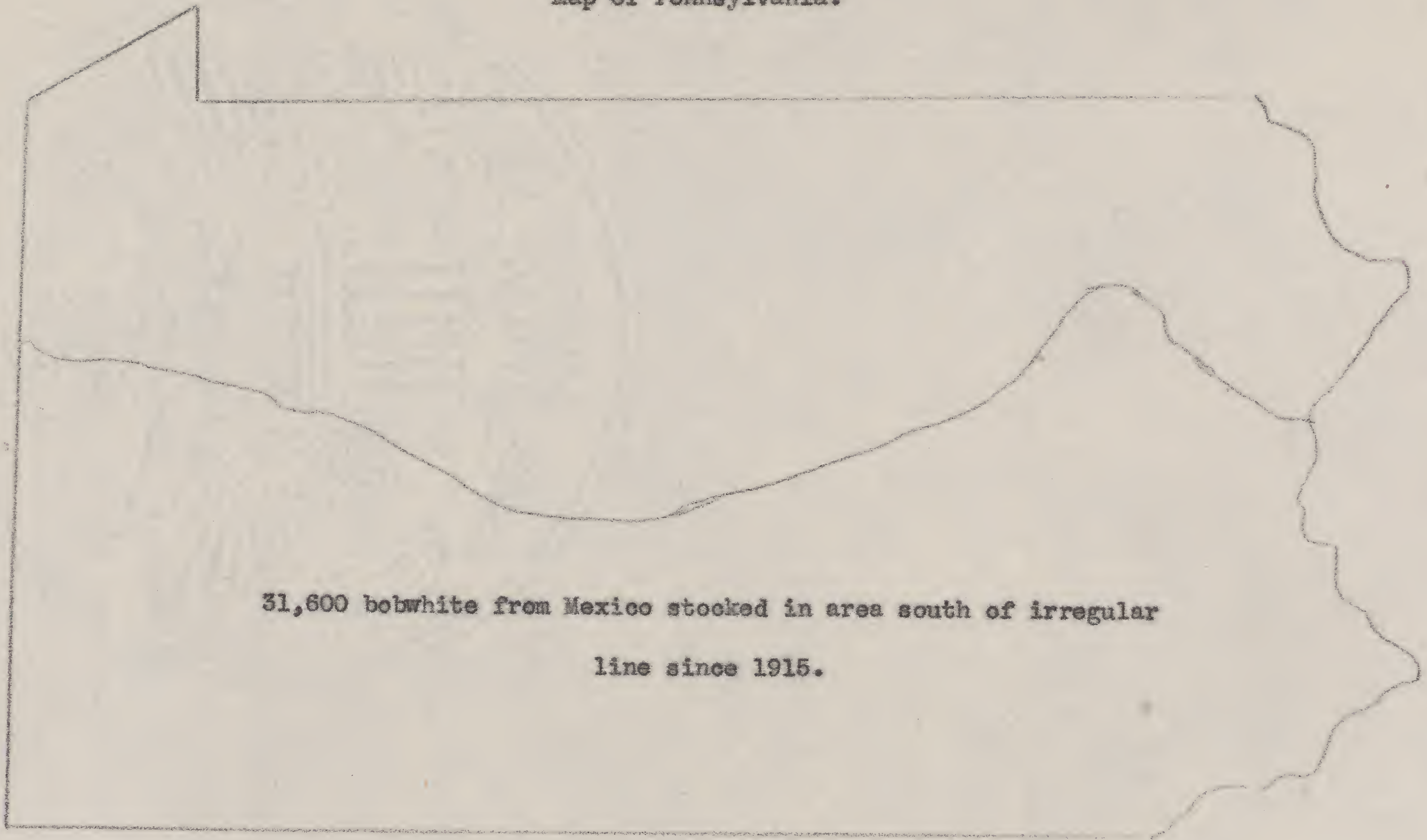
The introduced quail were released especially in regions where native birds had been shot out. They were turned out usually in early spring in pairs, though sometimes seven or eight were released in the same vicinity.

The following figures indicate the birds set at freedom in Fulton and Cumberland Counties, the two areas where I made the most of my observations:

Year.	Number released.	
	Fulton County.	Cumberland County.
1916	144 ^I	240
1918 (spring)	0	30
1918 (winter)	0	0
1919-1920 (winter and spring)	183	245
1920-1921	346	412
1921-1922	<u>360</u>	<u>504</u>
Total	1033	1431

^I Includes Franklin County adjacent.

Map of Pennsylvania.



31,600 bobwhite from Mexico stocked in area south of irregular
line since 1915.

Characters that Distinguish Mexican from Native Quail.

As a preliminary to discussion of the skins collected as specimens during this work characters of typical native quail Colinus v. virginianus and of Mexican quail C. v. texanus may be summarized as follows:

(a) C. v. virginianus.--Size large; back, head, and flanks varying from russet to hazel, distinctly rufescent; tertials, scapulars, and back with large blotches of black; dark bars on under surface narrow.

(b) C. v. texanus.--Size small; back, head, and flanks grayish or olivaceous brown, rufescent tinge if present confined to upper back and hind neck; black blotches on tertials, scapulars, and back small or absent; dorsal surface with fine but distinct cross bars of buff; black bars on under surface broader and heavier.

The so-called "Mexican" bird is distinctly grayish above and has the under surface very heavily barred with black, characters that distinguish it at a glance from typical virginianus.

Observations on Specimens Secured.

During this work attempt was made, not to secure large numbers of quail, but to take two or more birds from as many coveys as possible on the assumption that as it was the beginning of the hunting season and the birds had not been scattered, each covey represented in the main the offspring of one pair of birds, and that its members would show more or less similar characters.

Quail were fairly common through the region visited, but coveys were frequently difficult to locate. On November 1 south of McConnellsburg we encountered four coveys of birds. Four specimens taken (Nos. 6727 to 6730) came from three bands, while I examined birds killed by others from the remaining bunch, as well as from two other coveys found by other hunters north of town. These all seem to be the native stock. Mexican quail have been introduced here in numbers, but native quail have persisted in greater abundance here in Fulton County than elsewhere, as they have been hunted less and have had better cover.

On November 2, in the vicinity of Edenville, in Franklin County, only one covey was located from which we secured four birds (Nos. 6731 to 6734). These birds came from an area where a dozen Mexican quail had been released the season previous. They clearly indicate that they are hybrids between the native and introduced birds. All are barred heavily with black below. One is distinctly rufescent above with the heavy black markings of virginianus. A second is rufescent to a less degree and has the black markings more broken and many fine light cross-barrings on the feathers, while the third is almost as grayish as typical texanus though having more black on secondaries, back and tertials. The fourth bird of which only the wing was preserved resembled number two. These four are distinctly intermediate between the two forms and show a blend of the characters of the two parents.

On November 3 near Carlisle a covey on the Government reservation yielded two birds (Nos. 6736 and 6737) that while nearest virginianus may have an infusion (two or more generations back) of texanus blood as they are slightly paler above than typical virginianus and one is marked more heavily below.

On this day I examined 21 quail from four coveys, killed by other hunters. Twenty of these were more or less typical native birds. One however (No. 6735) an adult male that is just completing the molt is typical texanus, and appears to be one of the imported birds that had been released. This bird may not have bred for some reason, and may simply have been associated with a band of native birds.

On the following day, near Carlisle, two coveys were located. The first, from which two quail were shot (Nos. 6738-6739) came from an area where a number of Mexican quail had been stocked, are hybrids between the two forms. They are birds of the year, and show a marked tendency toward texanus.

The second covey from which one bird was taken (No. 6740) was composed of large well-marked native birds. Three quail from another covey, killed by other hunters were also the native form.

The specimens secured may be tabulated as follows:

Typical <u>C. v. virginianus</u>	5
<u>C. v. virginianus</u> with questionable infusion of <u>texanus</u> blood .	2
Typical <u>C. v. texanus</u>	1
Hybrids between <u>virginianus</u> and <u>texanus</u>	6
Total	14

Of two additional quail, male and female, taken November 11 by game protector H. H. Gibb near Carlisle, and forwarded to Washington for examination one is also an evident hybrid and apparently is a first cross since it

shows a strong tendency toward texanus. The other, an adult male, is typical texanus, probably one of the original introduced stock.

Weights of Quail.

Specimens secured when not damaged badly in shooting were weighed. Results (in grams) are given in the following table:

Colinus v. virginianus.

No. 6728, male,	McConnellsburg, Pa.,	Nov. 1, 1922	192 grams.
" 6729, "	" " " "	" " " "	188 "
" 6740, "	Carlisle, "	" 4, "	197 "
" 6727, female,	McConnellsburg, "	" 1, "	196 "
" 6737, "	Carlisle, "	" 3, "	185 "

Colinus v. texanus.

No. 6735, male,	Carlisle, Pa.,	Nov. 3, 1922	157 grams.
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Hybrid C. v. virginianus X texanus.

No. 6731, male,	Edenville, Pa.,	Nov. 2, 1922	170 grams.
" 6732, "	" " " "	" " " "	176 "
" 6733, "	" " " "	" " " "	184 "
" 6734, female,	" " " "	" " " "	180 "
" 6738, male,	Carlisle, "	" 4, "	155 "
" 6739, female,	" " " "	" " " "	172 "

Disparity in size between virginianus and texanus is evident at a glance. It will be noted that the hybrids are usually intermediate in weight between the two parent forms.

Conclusion.

From this brief investigation it appears that C. v. texanus may establish itself in regions where it has been stocked in Pennsylvania, but that in spite of the large numbers that have been brought in that it is not the dominant bird of the region. It appears to hybridize with the native virginianus, and cross-bred birds exhibiting a mingling of characters of the parent stocks, with a predominance in favor of virginianus. This will explain claims made by sportsmen that the introduced quail rapidly assume the color, markings, and size of the native bird.

November 30, 1922

A. Wetmore.

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY
WASHINGTON, D. C.

ADDRESS REPLY TO
CHIEF, BUREAU OF BIOLOGICAL SURVEY,
AND REFER TO

O-T

November 23, 1922.

Mr. Alex Wetmore,
Assistant Biologist,
Bureau of Biological Survey,
Washington, D. C.

Dear Sir:

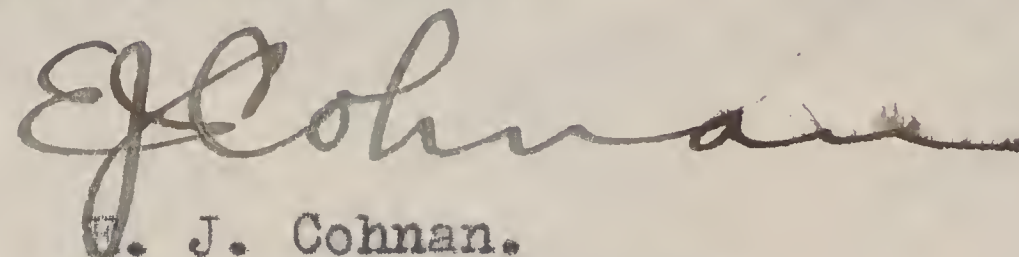
In the examination of your reimbursement account for the period
October 31 to November 4, inclusive, under your letter of authorization
No. 98-Bi, the following difference is noted:

Disallowed \$0.20

November 3, Excess subsistence. Breakfast 65¢, dinner 50¢,
supper 75¢, waiter fees 30¢, lodging \$3.00. Total \$5.20. Maximum al-
lowance \$5.00.

Amount claimed - - -	\$21.59
Difference as noted	<u>.20</u>
Approved for - -	\$21.39

Very truly yours,



E. J. Cohnan.
In Charge of Accpunts.

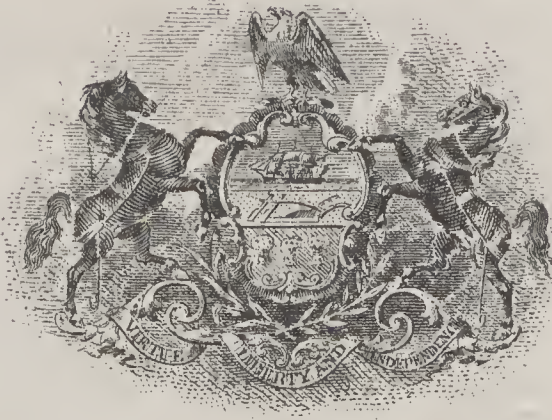
EJC:mpd

COMMONWEALTH OF PENNSYLVANIA

DR. CHARLES B. PENROSE, *President*
PHILADELPHIA

JOHN M. PHILLIPS, *Vice-President*
PITTSBURGH

W. B. McCALEB
HARRISBURG



DR. H. J. DONALDSON
WILLIAMSPORT

JOHN S. SPEER
ST. MARY

WM. S. ELLIS
BRYN MAWR

SETH E. GORDON, *Secretary*
HARRISBURG

OFFICE OF THE
BOARD OF GAME COMMISSIONERS
CAPITOL BUILDING
HARRISBURG, PA.

Nov. 21, 1922.

Dr. A. Wetmore,
c/o Biological Survey,
Washington, D.C.

My dear Doctor:

Upon returning to the office after an absence of a few days, I find your letter of November 10th on my desk.

I have instructed Protector Gibb to send you some additional specimens, and if I can get an opportunity to get into several coveys of birds and get some specimens that will be worth while, I will try and send you some before the end of the month. I will certainly be glad to learn from you the results of your investigation in Maryland. I tried to get some specimens for you in Adams county on November 11th. We got into two different coveys, one of them natives beyond any question, and the other Mexicans beyond any doubt. In the Mexican covey we killed the old hen, but the dogs mutilated her so badly that she was not desirable for your purpose. We also killed four young birds out of that covey, but their plumage was not yet fully developed, so that I did not think you would desire them for your collection.

Very truly yours,

A handwritten signature in cursive script, reading "Seth E. Gordon".

Secretary, Game Commission.

GM.

THIS LETTER WAS DICTATED BY MR. GORDON,
WHO WAS OBLIGED TO LEAVE BEFORE READY
FOR SIGNATURE.

1931, 1922

1912.

	Dollars.	Cents.
Breakfast ----- tip -----		
Dinner <i>Harrisburg</i> ⁶⁰ tip <i>10</i>		50
Supper ----- tip -----		
Lodging -----		
Pullman porter -----		10
Waiter fees -----		10
Hotel porter -----		
Station porter -----		
Checking baggage <i>3</i> pcs.		30
<i>fare Wash to Harrisburg</i>		4.4
<i>Carfare house to depot</i>		07
<i>Le. Washington 7:45 a.m. P. R. Co.</i>		
<i>at Wash. to Harrisburg (reg.) 9</i>		
<i>arr. Harrisburg 11:15 a.m.</i>		
<i>Le. Harrisburg in auto 2:00 p.m.</i>		
<i>arr. Mc Connellsburg 5:45</i>		

11/1

[illegible]

-----, 191.-----

8-829

11/4

191

[illegible]

Colinus v. Virginianus
distinctly rufescent on back, head
and flanks; . tertials, Scapulars and
back with large blotches of black;
dark bars on under surface narrow.

Colinus v. Texanus

back, head and flanks, grayish
or olivaceous, rufescent tinge
if present confined to upper back
and hind neck; blotches blotches
on tertials, scapulars & back
small or absent; dorsal surface
with fine but distinct cross
bars of buff; black bars on
under surface heavier.
upper surface with a grayish
olivaceous cast.

Quail records, Penn.

First introduction 1914.

a few brought in during 1914-15.

Birds introduced in section outlined on blue-print map.

Collecting to be done in two counties in which following are records of Mexican Quail released.

	Fulton Co.	Cumberland Co.
1916	144 ^{1/2}	240
1918 (Spring)	0	30
1918 (winter)	0	0
1919-20 (winter-spg.)	183	245
1920-21	346	412
1921-22	360	504
Total	1033	1431

part includes Franklin Co adjacent

Birds purchased from
Mr. Frank Kent, C. E. Brewster,
Wm. J. Mackinnon, Wm. Leam,
W. G. (Snake) King, American
Mexican Bird & Animal Co (Barro
Tex.)

Price 15⁰⁰ - 30⁰⁰ per doz. live arrival
usually guaranteed.

11/1/22 Mc Connellsburg, Pa.

~~♀~~

Colinus v. virg.

♀

weight

196 gr.

7.28 g.

♂

"

188 "

"

"

192 "

"

"

182 "

6 1/2 g.

♂ still in juv. plum.

146 "

Meals & giving
juv

8.00
50

1 1/2 Edinville, Pa.

♂

weight.

184 gr.

"

"

170 "

"

"

176 "

♀

"

180 "

17/2

Frankfort Ind. Cumberland Co.
9 mi. W. of Carlisle
7-8 birds liberated in same
locality last spring.
21 birds - 1 Texanus
5 evident hybrids

Texanus	♂	157 grams.
Virg.	♀	185 "

Carlisle 10 mi N.W.
" " N.

♂	mixed.	155gms
♂	natural	197 182 "
♀	mixed	172 ..

Carvel Hall Hotel ✓
Annapolis ✓
Ferry at 9⁰⁰ Sunday A.M.

Pennsylvania skins (1922)

7 skins are typical of virginianus
6727, 6728, 6729, 6730, 6736, 6737, 6740

2 skins are typical of texanus
and are apparently introduced
individuals. 6735 and one rec'd
from gibb.

7 skins are hybrids Texanus x
virginianus. 1

One of these 6733 might pass for
a true Texanus.

Two (6731 and 6732) from same
covey are like virginianus above
~~but~~ are marked below nearly as
in Texanus.

The wing of a fourth (6734) is
like 6733. ~~Size~~

These four from one covey. in
wing length ~~size~~ they resemble virginianus.

Three others 6738-6739
and one from gibb are intermediate
in color but have the wing
measurement of virginianus.

Texanus

dark barring on under surface
broad, heavy, usually extending
over entire abdomen. Some females
occasionally with abdomen nearly
immaculate

Above with little or no rufescent
color and with black spots on
tertials & inner secondaries reduced
or lacking. Numerous somewhat
indistinct buffy cross bars.
Upper back streaked & speckled
distinctly with black.

Birds from south Texas frequently
somewhat more rufescent above.

.....

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY

WASHINGTON, D. C.

ADDRESS REPLY TO
CHIEF, BUREAU OF BIOLOGICAL SURVEY,
AND REFER TO

October 28, 1922.

O*P
Travel Instr.

Dr. Alexander Wetmore,
Bureau of Biological Survey,
Washington, D.C.

Dear Dr. Wetmore:

In accordance with your Letter of Authorization No. 98-Bi you are directed to proceed on or about October 31, 1922, to Harrisburg, Pennsylvania, where you will get in touch with Mr. Seth E. Gordon, Secretary of the Pennsylvania State Game Commission. We desire to secure specimens of the Mexican quail that have been introduced into Pennsylvania recently, and Mr. Gordon has kindly offered to cooperate in this matter. It is reported that the introduced birds in question have produced good covies this season; The specimens are wanted to determine whether or not they have been modified by change in environment, or whether they have bred true to their parent stock.

The work outlined above should require from five days to a week for its completion. When it is finished you should return to your official station, Washington, D.C.

With best wishes, I am

Very truly yours,

W. Henderson

Acting Chief of Bureau.

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY
WASHINGTON, D. C.

No. 372 -B1.

ALLOTMENT, AND INCREASE OR DECREASE.

October 26, 1922.

Dr. Alex. Wetmore,

Assistant Biologist.

Dear Sir:

By direction of the Chief, Bureau of Biological Survey, the sum of
\$30.00 has been added to the amount allotted for expenditures
under the appropriation "General Expenses, Bureau of Biological Survey, 1923,"
SYMBOL NO. 19 (Investigation of Wild Animal Life), during this fiscal
(Show this number on each account charged hereto.)
year, under Letter of Authorization No. 98 -B1., dated July 11, 1922.

This is for the purpose of covering expenses incurred in connection with
above project.

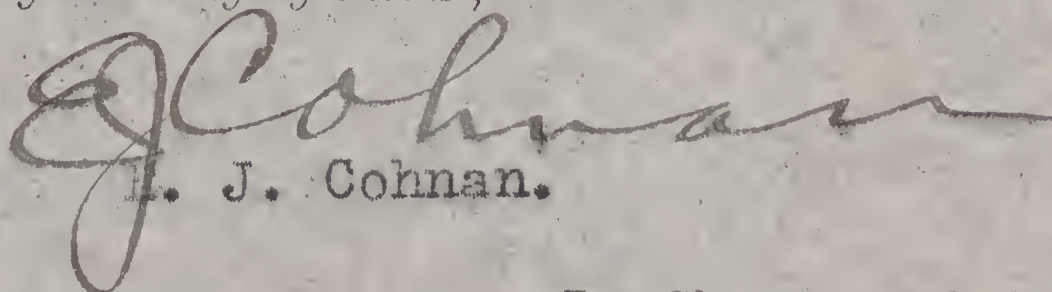
Liabilities may be incurred against this amount not to exceed:

2nd Quarter \$30.00

Unexpended balance may be carried forward into the following quarter.

You will be held responsible for compliance with the terms of your Letter
of Authorization and for keeping within the amount of your allotment. IF YOUR
TOTAL ALLOTMENT IS EXCEEDED WITHOUT PREVIOUSLY OBTAINED WRITTEN AUTHORITY OF
THE CHIEF OF THE BUREAU, THE EXCESS WILL NOT BE MET BY THE BUREAU, UNLESS
(1) THERE IS MONEY AVAILABLE FROM THE PROPER APPROPRIATION AND (2) A SATIS-
FACTORY EXPLANATION IS MADE FOR FAILURE TO SECURE IN ADVANCE THE NECESSARY
INCREASE.

Very truly yours,


L. J. Cohnan.

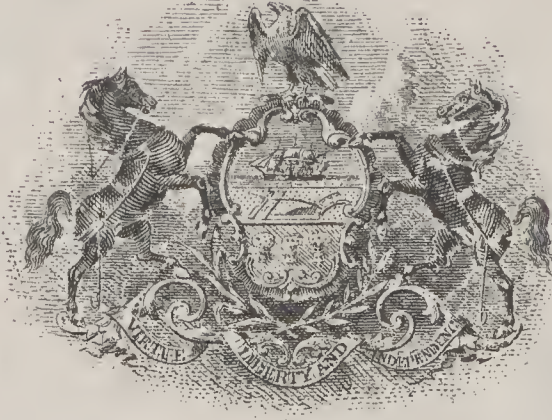
In Charge of Accounts.

COMMONWEALTH OF PENNSYLVANIA

DR. CHARLES B. PENROSE, *President*
PHILADELPHIA

JOHN M. PHILLIPS, *Vice-President*
PITTSBURGH

W. B. McCALEB
HARRISBURG



DR. H. J. DONALDSON
WILLIAMSPORT

JOHN S. SPEER
ST. MARY

WM. S. ELLIS
BRYN MAWR

SETH E. GORDON, *Secretary*
HARRISBURG

OFFICE OF THE
BOARD OF GAME COMMISSIONERS
CAPITOL BUILDING
HARRISBURG, PA.

October 14, 1922.

Dr. Alexander Wetmore,
c/o Biological Survey,
Washington, D. C.

My dear Sir:

We send you herewith, by registered letter,
Non-Resident Hunter's license No. 7641 with tag to
correspond. This license is sent gratis, as per
arrangement with the Biological Survey.

Respectfully yours,

Seth E. Gordon
Secretary, Game Commission.

NS.
Encls.

DON'T FAIL TO CARRY THIS LICENSE AND DISPLAY YOUR TAG WHILE HUNTING

\$10.00

LICENSE No. 7641

PENNSYLVANIA NON-RESIDENT HUNTER'S LICENSE

This license is issued under the provisions of the act of May 3, 1917, entitled "An act for the better protection of wild animals and birds and game within this Commonwealth, requiring non-residents to procure a license before hunting in this Commonwealth, providing penalties for violation of any of its several provisions," etc.

Name, Dr. Alexander Wetmore, Post Office Address, U.S. Biological Survey, Washington, D.C.

Height, 6' 3" Complexion, Dark

Color of Hair, Black Color of Eyes, Hazel

Age, 36

Remarks, (Issued gratis per arrangement with Biological Survey)

This license entitles the owner thereof to hunt in any part of this Commonwealth during the game season of that calendar year in which it is issued, under the terms and prescriptions of existing law. The license is not transferable and is more in the nature of a tax receipt than license, as it does not pretend to authorize hunting or shooting upon lands within the State contrary to the wishes of the owners thereof, or in violation of the wishes of the person controlling such lands. It does not authorize the taking or killing of animals or birds protected by any other law of the State, contrary to the provisions of that law, and permits the capture or killing of game only during what is known as the open season for such game in this Commonwealth.

Game, except elk, may be carried out of the State by the holder of this license in such manner as prescribed by law, that such licensee has lawfully taken not exceeding during the season the number that any one person may lawfully kill in any one day.

See to it that your tag number corresponds with the number of your license. Display your tag so it is plainly visible from the rear at all times while hunting. You must show your license on demand.

Issued, OCT 13 1922 192

Good for the game season of 1922

Lith & Gordon
Secretary of Game Commission

SEE BACK FOR FURTHER INFORMATION

Treasurer of County, Pennsylvania.

PREVENT FOREST FIRES.

DON'T SMOKE WHILE MOVING IN THE WOODS

Sections 32 and 33 of the Act of June 7th, 1917, Covering the Transportation of Game are as Follows:

"Section 32. It shall be unlawful for any person to ship game of any description or any part thereof killed in a wild state in this Commonwealth by parcel post; and it shall be unlawful to ship or transport by express or as freight or baggage, or by common carrier of any description, or by automobile or vehicle of any kind, any bird or animal, or part thereof, of the kind commonly known as small game, killed in a wild state in this Commonwealth, or for any common carrier to transport small game of any kind from one point to another point in this Commonwealth, unless such small game is accompanied by the owner thereof or is carried upon the same train or automobile or vehicle with such owner; and where such game is of a kind commonly known as small game the same shall be carried upon the person in the hunting coat or game bag or openly as hand-baggage without cover in such manner as to be easily seen and inspected, or when carried in baggage or boxed for shipment each package or box or receptacle of any description containing game shall have attached thereto a card or marker bearing in English the name of the person owning same, with the place of his residence, the name of the county wherein such game was killed, and the number of each species of small gamebirds or animals contained in said package.

Where game of the kind commonly known as large game is shipped, the carcass shall in all instances have attached a card or marker bearing the name and address of the owner, with the name of the county wherein same was killed.

Where large game is cut up for shipment, each division thereof shipped uncovered, and each package of every description containing any part of such game, shall have attached a card or marker bearing in English the name of the owner of such game, with his home address, and the character of the contents of such package, so that such contents may be determined by an outside inspection of such package. Provided: That no provision of this Act relative to the shipment of parts of game within the Commonwealth shall apply to the shipment of that part of either a bird or animal either legally or accidentally killed, that the holder thereof may desire to preserve as a trophy, or as a specimen, and shall send to a Taxidermist within the Commonwealth for tanning or mounting, when the package is properly marked showing the contents thereof.

Any person who shall transport, or attempt to transport, a game animal or game bird of any description, or part thereof, contrary to any provision of this section, shall be liable to a penalty equal in amount to the penalty imposed by this act for the killing of such animal or bird during the close season, and every person acting for himself or for another or as the agent of a common carrier who shall knowingly or negligently receive game for transportation contrary to the provisions of this section shall be liable to a penalty of twenty-five dollars for each offense."

"Section 33. No person shall at any time transport, or ship, or remove, or cause to be transported or shipped or removed, out of this State, any game animal or game bird or wild bird protected by this act, or shall catch, take or kill, or have in his possession, or under his control, any of the game birds or game animals, or wild birds of this State the killing of which at any or all times is prohibited by the laws of this State with intent to allow or aid in the shipment or removal thereof out of this State, and, excepting as provided for in this act, it shall be unlawful for any person acting in the capacity of a common carrier, or as the operator of an automobile or in control of a vehicle of any kind, to knowingly receive for transportation, or transport, or remove, or aid or assist in removing, beyond the limits of the State, any of the wild birds or game birds or game animals mentioned in this act. Whoever shall offend against any provision of this section shall be liable to a penalty of two hundred dollars and six months imprisonment for each elk, and one hundred dollars for each deer, and twenty-five dollars for each game bird, and ten dollars for each rabbit or hare or squirrel, or part thereof, either carried or attempted to be carried, out of the State in violation of this section: Provided, That nothing contained in the Laws of this Commonwealth shall be held to impose any penalty upon the transportation of game in unbroken packages in transit through this State from another State, or to the shipment out of the State at any time of game legally killed or taken in another State, whether the same be in original packages or otherwise, and no penalty shall attach in any way when game legally killed in this Commonwealth is delivered in good faith to an express company or other common carrier for transportation from one point to another point in this State, and is accompanied by the owner thereof, and actually delivered at the point of destination within this State, if necessarily carried out of this State to reach its destination, and: Provided, further, THAT ANY NON-RESIDENT LICENSED HUNTER MAY TAKE WITH HIM PERSONALLY, WHEN LEAVING THE STATE, IN MANNER PRESCRIBED BY THAT LAW CONTROLLING THE SHIPMENT OF GAME FROM ONE POINT TO ANOTHER POINT IN THIS COMMONWEALTH RELATIVE TO THE TAGGING OF GAME, ANY OF THE GAME ANIMALS OR GAME BIRDS, EXCEPT WAPITI OR ELK, THAT SUCH LICENSEE HAS LAWFULLY TAKEN OR KILLED, NOT EXCEEDING DURING THE SEASON THE NUMBER THAT ANY ONE PERSON MAY LAWFULLY TAKE OR KILL IN ANY ONE DAY.

Any person violating this section relative to the carrying or transportation of game out of the State by non-residents shall be liable to a penalty for each animal or bird taken, law for the killing of such animal or bird during the close season, and in addition shall be or attempted to be taken, out of the State, equal in amount to the penalty now imposed by law for the killing of such animal or bird during the close season, and in addition shall be denied the right to hunt in this State for a period of five years from the date of his offense, under a penalty of twenty-five dollars for each day such person may hunt contrary to this provision."

For further information relative to seasons, bag limits, etc., see official publications of the Game Commission which will be furnished upon request.

FOREST FIRES DESTROY GAME! IT IS TO YOUR INTEREST TO GUARD AGAINST FIRES!

PLEASE BE CAREFUL WITH YOUR FIRE IN THE WOODS! IT MEANS MORE GAME TO YOU!

PENNSYLVANIA

Non-Resident Hunter's License Tag

DISPLAY THIS TAG ON MIDDLE OF BACK

LICENSE NO.

7641

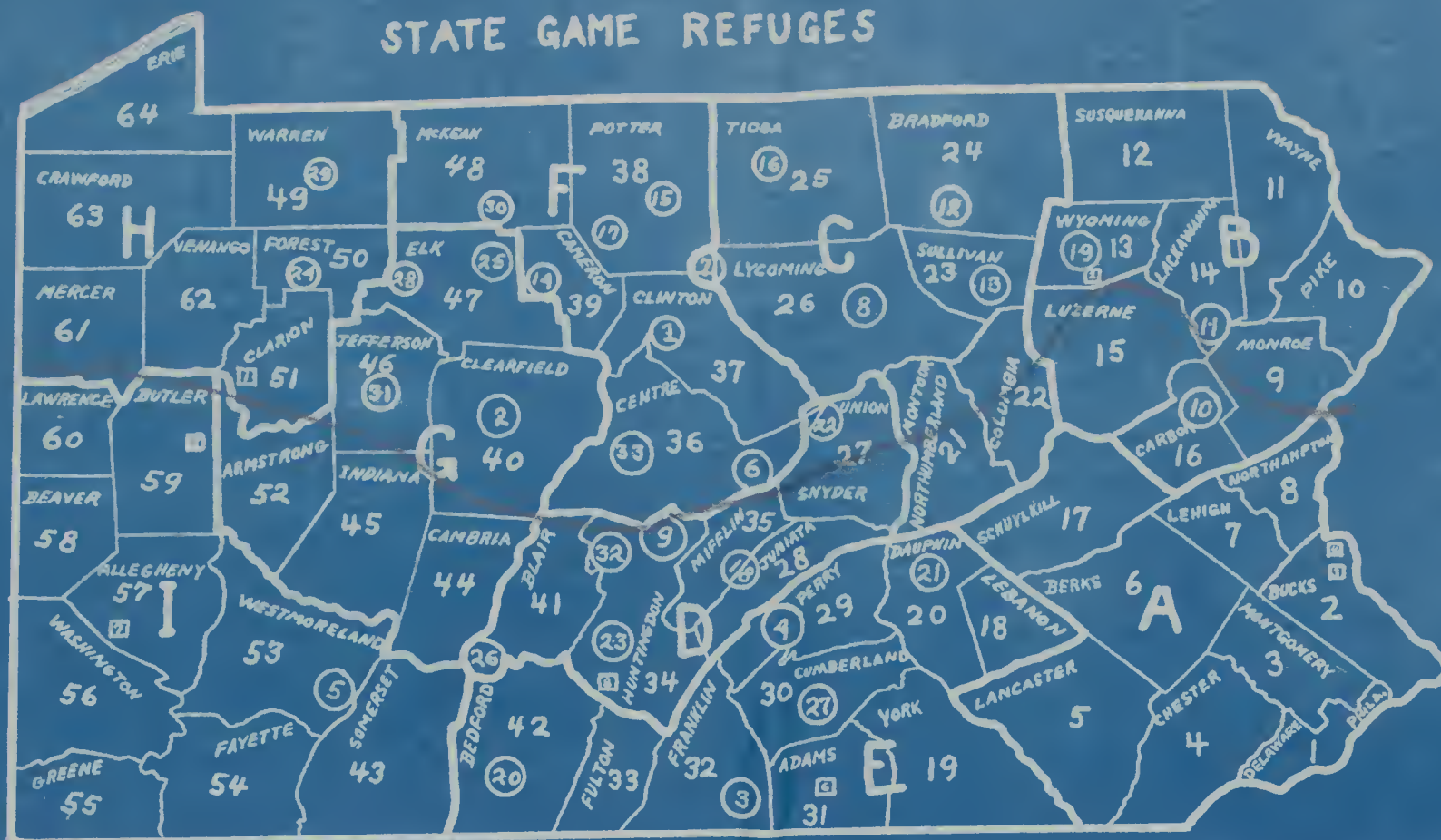
Map of Pennsylvania
Game Protector Districts
and
State Game Refuges

PENNSYLVANIA
BOARD OF GAME COMMISSIONERS.

GAME PROTECTOR DISTRICTS

AND

STATE GAME REFUGES



① State Game Refuges.

□ Auxiliary Game Refuges.

DIST. NO.	OFFICER IN CHARGE:	POST OFFICE ADDRESS:	EXPRESS ADDRESS:	TELEPHONE:
1.	James H. Carpenter,	Box 342, Chester,	Chester,	Bell 2414-J.
2.	Warren Fretz,	55 W. Oakland Ave. Doylestown,	Doylestown,	" 183-J.
3.	Jeremiah S. Reinert,	Box 191, Lansdale,	Lansdale,	" 30-W, Broadway House.
4.	Jarvis E. McCann,	83 S. 5th Ave. Coatesville,	Coatesville,	318-J Coatesville.
5.	Samuel A. Keene,	Christiana,	Christiana,	" 572 & United 18-E.
6.	Chas. F. Fenstermaker,	239 N. 11th St. Reading,	Reading,	" 1409-M.
7.	James D. Geary,	1148 Union St. Allentown,	Allentown,	" 409-W.
8.	Benjamin A. Wright,	673 Ferry St., Easton,	Easton,	" 2678.
9.	Wm. H. Merring,	East Stroudsburg,	East Stroudsburg	" 154, Stroudsburg.
10.	John W. Hornbeck,	Dingmans Ferry,	Milford,	Van Pike Tel. Co., #23.
11.	Sidney N. Brink,	Hawley,	Hawley,	Bell 69-R3.
12.	George H. Watrous,	Montrose,	Montrose,	" 353 & Merchants 513.
13.	Walter D. Young,	Tunkhannock,	Tunkhannock,	" 51-W.
14.	William Anneman,	1103 Watson Ave. Scranton,	Scranton,	" 1855-J.
15.	Elmer D. Huff,	61 Park Pl. Kingston,	Kingston,	" 7282-M.
16.	James L. Boyle,	88 South Mauch Chunk,	Mauch Chunk,	" 214-M.
17.	Albert F. Hartwig,	212 Greenwood, Tamaqua,	Tamaqua,	United 955.
18.	William L. Ibach,	Newmanstown,	Sheridan (Leb. Co.),	Bell 7-R2 & Ind. 42-4.
19.	William C. Stevens,	256 W. Cottage Pl., York,	York,	United 2214.
20.	Jas. B. Lightner,	619 Pepper St., Hbg.,	Harrisburg,	Bell 3537-W.
21.	B. F. Zettlemoyer,	1208 Susquehanna Ave. Sunbury,	Sunbury,	" 243-Z.
22.	Harry W. Miller,	R.F.D. No. 3, Bloomsburg,	Bloomsburg,	" 224-R.
23.	A. Lincoln Cox,	Dushore,	Dushore,	" 31-3, Dushore Ex.
24.	George D. McCabe,	Towanda,	Towanda,	Independent 69.
25.	L. G. Hoyt,	Tioga,	Tioga,	Farmers Mutual 28-D.
26.	Charles H. Snyder,	Montoursville,	Montoursville,	Bell 796-R.
27.	Miles Reeder,	257 Green St. Mifflinburg,	Mifflinburg,	" 157.
28.	Hugh H. Groninger,	Port Royal,	Port Royal,	United 23-22.
29.	S. Maurice Shuler,	Box "D" Liverpool,	Liverpool,	Bell - Liverpool Ex.
30.	Harry Gibb,	145 Porter Ave. Carlisle,	Carlisle,	" 564.
31.	Leo E. Bushman,	264 Baltimore, Gettysburg,	Gettysburg,	Cumberland Valley 148 Y.
32.	Ray O. Dunlap,	116 N. Glenn, Chambersburg,	Chambersburg,	C.V. Phone 80-X, Chambersburg.
33.	John D. Berrier,	McConnellsburg,	Fort Loudon,	"
34.	B. A. Benson,	613 Penn. St., Huntingdon,	Huntingdon,	" 137-Huntingdon.
35.	Ralph E. McCoy,	149 Valley St. Lewistown,	Lewistown,	" 231-R.
36.	Charles Batchelor,	Phillipsburg,	Phillipsburg,	Hunt. & Clearfield Phone.
37.	Grant Stout,	Renovo,	Renovo,	Bell 38.
38.	J. R. Hazelet,	Galeton,	Galeton,	" 168.
39.	John B. Ross,	520 Broad St., Emporium,	Emporium,	" 283.
40.	Wm. J. Davis,	3 Locust St., Clearfield,	Clearfield,	" 60-W.
41.	Frank A. Myers,	1613-16th St., Altoona,	Altoona,	" 2246.
42.	Eli Ritchey,	Everett,	Everett,	County Phone 7-R2.
43.	Harvey E. Bittner,	224 Large St., Meyersdale,	Meyersdale,	Economy Phone 117 (Bell).
44.	Enoch G. Miller,	Ebensburg,	Ebensburg,	Bell 257-J.
45.	Iddo M. Lewis,	Marchand,	Saran,	" Marchand Exchange.
46.	David A. Zujall,	Punxsutawney,	Punxsutawney,	" 264-J.
47.	E. W. Turley,	7 South St., Ridgway,	Ridgway,	" 149-R, Commercial Union 498-Z.
48.	Carl B. Benson,	Box 511, Mt. Jewett,	Mt. Jewett,	" 65.
49.	Elmer L. Pilling,	Box 153, Irvine,	Irvine,	" 15-R4-Youngsville Ex.
50.	Hamlin F. Wilson,	Tionesta,	Tionesta,	" 7-A & Forest Co. Ph. #8.
51.	H. N. Fenstermaker,	Clarion,	Clarion,	" 737-J.
52.	A. N. Strader,	215 S. Jefferson, Kittanning,	Kittanning,	" 911, Kittanning Exchange.
53.	H. R. Armbrust, Jr.,	R.F.D. #6, Greensburg,	Greensburg,	" 667-R13.
54.	Robert G. Bryson,	Alicia,	Waynesburg,	South Penn. Tel. Co. Phone.
55.	Charles M. Sines,	Waynesburg,	Waynesburg,	Bell 2103-J.
56.	Joseph P. Kennedy,	241 W. Wheeling, Washington,	Washington,	" 1550.
57.	Ralph A. Liphart,	334 E. 11th Ave. Homestead,	Homestead,	" 915-M, Beaver.
58.	Raymond L. Seager,	722 Quay Square, Beaver,	Beaver,	" 737-J.
59.	Joseph M. Curtis,	231 W. Pearl St., Butler,	Butler,	" 5127-R2-New Castle.
60.	Edward N. Eakin,	Hillsville,	Lowellville, Ohio,	" 341-R, Ind. 202-X.
61.	William J. Dickson,	64 Chambers Ave. Greenville,	Greenville,	Petroleum Phone 623.
62.	Frank F. Thurston,	543 Liberty St. Franklin,	Franklin,	Bell 143-Meadville Exchange.
63.	Raymond O. McIntosh,	726 1/2 Baldwin St. Meadville,	Meadville,	Mutual 82-243.
64.	Walter S. Cross,	851 Napier Place, Lawrence Park, Erie,	Erie,	

GAME PRESERVE KEEPERS.

1.	W. F. Mason,	Box 706, Renovo,	Renovo,	Bell 918-R2, Renovo Exchange.
2.	L. D. Rearick,	Anderson Creek,	Clearfield,	H. & C. (Bell) #9L, Clearfield.
3.	Seward Staley,	South Mountain,	Mont Alto,	Bell #93/R11, Waynesboro.
4.	John W. Fenton,	New Germantown,	New Germantown	" Blain Exchange.
5.	Norman W. Shawley,	Rector,	Ligonier,	" 186-3, Ligonier.
6.	Harry J. Wingard,	Coburn,	Coburn,	" 40-R2, Millheim.
7.		Slate Run,	Slate Run,	" Waterville Exchange.
8.	Bruce Woolver,	Williamsport (Proc. Star Rt.),	Montoursville,	United 39-1, Montoursville.
9.	Jesse M. Hassinger,	R.F.D. #1, Reedsville,	Reedsville,	" 18-22.
10.	W. O. Hicks,	White Haven,	White Haven,	Bell 40-R3, White Haven.
11.	W. J. Bailor,	Gouldsboro, (Star Route)	Gouldsboro,	" 7-3, Gouldsboro.
12.	George Ryder,	Leroy,	Laguerre,	" Leroy Exchange.
13.	Edwin W. Carpenter,	Jamison City,	Jamison City,	" 47-66, Benton Exch.
14.	George W. Cederberg,	R.F.D. #3, Emporium,	Emporium,	" 903-R2, Emporium Ex.
15.	Harry Van Cleave,	Conrad,	Hull,	" 61-R23-Austin Central.
16.	Stephen C. Baker,	R.F.D. #4, Wellsboro,	Arsonia,	" Wellsboro.
17.	Arthur G. Logue,	Sizerville,	Sizerville,	" 902-R22, Emporium Ex.
18.	R. E. Kauffman,	Mattawanna,	McVeytown,	" Mattawanna Exchange.
19.	George H. Hunt,	R.F.D. #1, Alderson,	McVeytown,	Commonwealth (Bell) 19-R0-Centermore land Ex.
20.	Paul A. Stump,	R.F.D. #4, Bedford,	Bedford,	"
21.	J. Ammon Bretz,	Lykens,	Lykens,	" 31-5, Lykens.
22.	Samuel E. Osenbaugh,	R.F.D. #2, Millmont,	Gleniron,	" 118-J3, Mifflinburg.
23.	John W. Bumgardner,	Trough Creek,	Entriken,	Martlesburg Phone.
24.	Edward Shaw,	Newmansville,	Tionesta,	Forest County Phone.
25.	John A. Seibert,	Straight,	Straight,	Bell 14-R4-Johnsonburg Ex.
26.	J. Frank Cavender,	R.F.D. #2, Portage,	Portage,	United-Mc Holly Springs Ex.
27.	J. Russell Spahr,	Pine Grove Furnace,	Pine Grove Furnace	
28.	J. B. Rearick,	Sheffield, % Big Run Jet.	Clarendon,	
29.	Emil L. Nelson,	Clarendon,	Clarendon,	
30.				
31.				
32.	C. A. Lightner,	Star Route, Petersburg,	Petersburg,	Bell 45-R31-Alexandria Exchange

TRAVELLING GAME PROTECTORS.

A.	Norman M. Wood,	Box 553, Coatesville,	Coatesville,	Bell 118.
B.	M. E. Sherman,	Box 51, 350 Race St. W. Pittston,	W. Pittston,	" 965-J.
C.	A. L. Budd,	Troy,	Troy,	" 1093 & Citizens Mut'l. 111 W.
D.	John J. Shauterback,	214 Logan St., Lewistown,	Lewistown,	United 83-Z & Bell 130.
E.	Charles B. Baum,	306-29th St., Penbrook,	Harrisburg,	Bell 6173-J, Harrisburg.
F.	L. K. Hogarth,	Smethport,	Smethport,	" 143.
G.	W. C. Kelly,	Du Bois,	Du Bois,	" 429-J.
H.	Herbert L. Beatty,	533 E. 11th St., Franklin,	Franklin,	" 215 & Petroleum 938.
I.	Henry J. Sines,	1509 E. Wash., New Castle,	New Castle,	Bell 3083-J.

OFFICE OF THE BOARD OF GAME COMMISSIONERS.

3RD FLOOR, EAST WING, CAPITOL BLDG.

HARRISBURG, PA.

SETH E. GORDON, SECRETARY.

Compiled Sept. 20, 1922.
C.A.H.

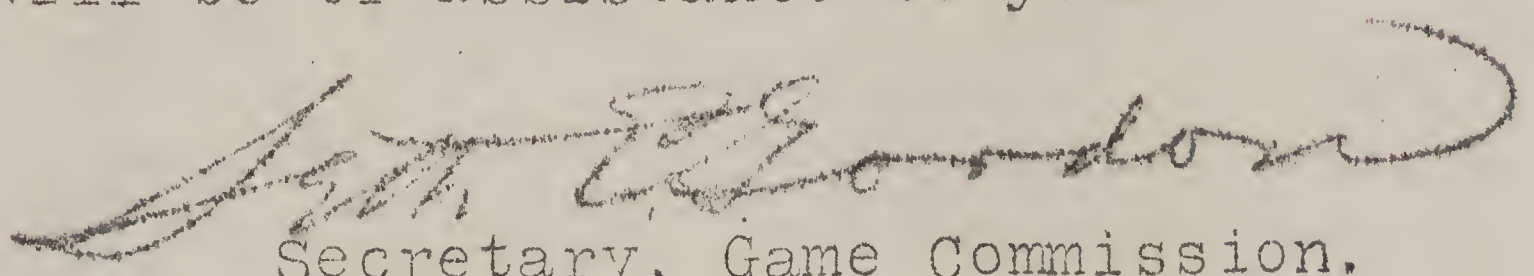
20 Sept 1903

PENNSYLVANIA'S GAME PROGRAM
ESPECIALLY THE SPORTSMEN - LANDOWNERS' PROBLEM
AND THE VALUE OF THE
PENNSYLVANIA HUNTER'S LICENSE TAG

Presented at the
SEVENTEENTH ANNUAL CONVENTION
of The
INTERNATIONAL ASSOCIATION OF
GAME, FISH AND CONSERVATION COMMISSIONERS

Held at
Madison, Wisconsin,
September 4th and 5th, 1922.

As a matter of information to those interested,
this paper has been mimeographed and a copy is sent
in the hope that it will be of assistance to you.


Secretary, Game Commission.

Harrisburg, Pa.
Sept. 15, 1922.

CONTENTS

	<u>Page</u>
1. Establishment of Pennsylvania Game Com- mission and service.....	1 to 4
2. Resume of activities of Pennsylvania Game Commission since 1915.....	4 to 7
3. Sportsmen-Landowners' problem, and sug- gestions for relief.....	8 to 14

PENNSYLVANIA'S GAME PROGRAM

BY

SETH E. GORDON
Secretary, Game Commission.

Mr. President and Fellow Members:

The subject assigned to me is not of my choosing, and while there are other phases of the work of conservation in the discussion of which one is less likely to loosen an avalanche of criticism, with the permission of the gentlemen arranging the program I will discuss principally the much-mooted sportsmen-landowners' question insofar as it applies to Pennsylvania. Nevertheless, since this problem seems to be a serious one throughout all thickly populated portions of the United States, the sooner the sportsmen and land-owners get together and understand each other the longer we can continue our free, American system of enjoying the outdoors and keep from facing conditions that have prevailed in European countries for many years.

To discuss this question intelligently, it will be necessary for me to give you a brief resume of the work of the Board of Game Commissioners of Pennsylvania, and the conditions as they exist there at this time.

ESTABLISHMENT OF BOARD AND SERVICE

The Pennsylvania Board of Game Commissioners was established in 1895 at the instance of sportsmen's organizations. They realized that more concerted action must be taken to secure proper observance of the game laws then on our books, and to improve upon those statutes as changing conditions demanded. The Board, six in number, has always consisted of prominent sportsmen of the highest type, who in their private life were experienced successful business and professional men. This Board is not a supervisory body, but an executive board having entire governing

power. The Members of the Board have never received a single cent of remuneration for their services or expenses; on the other hand they have spent large sums of money out of their own resources to further the cause they represent. With due credit to the worthy gentlemen present, it is the opinion of our best sportsmen that a board of this type is far superior to any one-man organization, or to any organization in which the head of the Department has all the executive power and is assisted by a supervisory board without power to control policies. The terms of the Members of our Board are three years each, but fortunately for the sportsmen of the Keystone State three of the Members of the Board have served continuously for eleven or more years. The President, Dr. Charles B. Penrose, has served since 1899, while the Vice-President, Mr. John M. Phillips, has been a Member since 1905. The balance of the Board have served for lesser periods. The continuance of the same Members over a number of years guarantees a continuity of policies and a stability throughout that could not be obtained without constantly shifting executive personnel -- something disastrous to any conservation activity. The Game Commission of Pennsylvania has always endeavored to keep in the closest possible touch with the desires of the sportsmen, and has probably more nearly represented the rank and file among the sportsmen than any other type of organization could have done, largely because the Members themselves are well distributed throughout the State and are keeping in close personal touch with the sportsmen continuously.

FUNDS -- HOW OBTAINED

No appropriation of any kind was made by the Legislature of 1895 that passed the organic law of our Board. Finally one of the leaders of the movement to establish the Board, the late Dr. Joseph Kalbfus, was prevailed upon to undertake the executive work under the direction of the Board, and continued that work for a period of six years without any remuneration. Fortunately for Pennsylvania, he remained in the work and discharged the duties devolving upon him with marked ability and

unusual credit to himself and his legion of friends until August 10, 1919 when he sacrificed his life in a railroad accident while in the performance of his duty. Finally the work of the Board did receive recognition and limited appropriations from the general funds of the State. The appropriations from 1897 to 1913 inclusive were as follows:

1897.....	\$ 800.00	(Postage and
1899.....	800.00	(expressage only)
1901.....	3,000.00	
1903.....	12,000.00	
1905.....	20,000.00	
1907.....	40,200.00	
1909.....	60,200.00	
1911.....	55,200.00	
1913.....	97,400.00	

Securing funds from general revenues was always a real problem for the sportsmen of Pennsylvania just as it has proven elsewhere; and the amount available entirely inadequate for the large field to be covered. In 1913 the Pennsylvania Resident Hunter's License Law was passed at the instance of the sportsmen and the funds paid in through this act were accumulated until June, 1915, since which time the entire cost of the work of the Pennsylvania Game Commission has been paid out of the funds collected from the sportsmen. In other words, since 1915 the sportsmen of Pennsylvania have "had their hands in their own pockets" and the Members of the Game Commission all feel that they are simply the directors in a large corporation in which the sportsmen of the State are the stockholders.

The annual issuance of licenses since the passage of our license law has been as follows:

<u>YEAR</u>	<u>RESIDENT</u>	<u>NON-RESIDENT</u>
1913	305,028	(Data not tabulated)
1914	298,972	462
1915	262,355	532
1916	290,422	662
1917	315,474	588
1918	311,290	478
1919	401,130	1,128
1920	432,240	1,725
1921	462,374	1,763

The fee for the Resident Hunter's License is \$1.00 from which the County Treasurers receive 10¢, and the fee for the Non-Resident Hunter's License is \$10.00, from which the

County Treasurers receive 50¢. The 1922 issuance of licenses will probably be somewhere between 475,000 and 500,000. In Pennsylvania we issue with each hunter's license a tag 3 1/2" x 4 5/8" made of a good quality of fabricoid, on which are printed the number of the license and the number of the county in which issued for identification purposes. I will discuss the benefits of this tag later.

ACTIVITIES SINCE 1915

Since June 1, 1915, when we began operating exclusively with the funds supplied by sportsmen, the annual disbursements for all purposes have gradually increased until at this time the average annual expenditure is \$500,000 per year. While a half million dollars is quite a snug sum to spend annually in behalf of the sportsmen of Pennsylvania in comparison with \$1,500 per year appropriated in 1901, it still does not permit intensive covering of the State in keeping with the rapidly growing population and ever changing conditions. We have in Pennsylvania an area of 45,000 square miles. In 1895, when our Board was organized, we had a population of slightly over five million (5,000,000) with a goodly amount of virgin forest still standing. Today with a population of nine million (9,000,000) people, the virgin forests cut and devastated and our highly developed industrial activities, with an increase of at least 300 to 500 per cent in the number of sportsmen in the State, the problem confronting us is an entirely different one from what it was in 1895. As the population increases, industrial activities are enlarged, an attendant increase in the number of hunters, these problems will gradually become more acute, and the same condition undoubtedly applies in a number of other States today.

The first principle of wild life conservation is the protection of the native breeding stock. This means not only education of the people to the purpose of the laws and their enforcement, but also destroying vermin, feeding game in the

winter time, and re-stocking. The maintenance of the field organization, of our game refuges, employment of refuge keepers, destroying vermin, and the feeding of game have taken up the bulk of the funds paid in by the sportsmen; the balance has been expended in re-stocking, purchase of lands for refuges, etc.

The game refuge system of Pennsylvania is undoubtedly one of the most important factors in our work. Since 1915 the number of game refuges has been increased from 6 to a total of 30, with three more under way. The area within the refuges now under our control is about 75,000 acres, and the balance of about 135,000 acres under control of the Game Commission is open to hunting. In addition to the open hunting lands controlled by the Department, the State Forest Department owns more than a million acres, all of which is open to hunting. Each game refuge has plenty of free shooting ground around it.

Instead of 20 Game Protectors and 6 Refuge Keepers in the entire State, as we had June 1, 1915, we now have 64 County Game protectors for the 67 counties, 5 Assistant Game Protectors in some of the large counties, 10 Traveling or Supervisory Officers, Trapping Instructor, and a Keeper in charge of each Refuge.

Seventy-five per cent of our efforts are spent educationally, but regardless of this the total number of successful prosecutions handled by our Department during 1920 was 1895 cases, and during 1921 the number was 2884 cases. Of the 1920 prosecutions, 144 were fish law cases, and of the 1921 prosecutions, 233 were fish law cases, that were prosecuted by our officers as a matter of co-operation with the Department of Fisheries.

In 1919 the Game Commission collected and deposited in penalties, propagating license fees, etc., exclusive of hunters' licenses, \$29,014.06; in 1920, \$55,278.62; and in 1921, \$69,963.25.

Since 1915 we distributed game as follows:

Elk.....	170
Deer.....	780
Wild Turkeys.....	2,000
Ring-neck Pheasants.....	31,000
Ring-neck Pheasant Eggs.....	72,600
Rabbits (Cotton-tail).....	40,000
Varying Hares (Snow-shoe rabbits).....	10,000
Quail, Bob-white.....	31,600
Squirrels, fox.....	55
Quail, Gambel.....	180
Beaver.....	70

The majority of the rabbits, quail and hares were secured during the last two years.

The total expenditures for all of these activities are keeping pace with our annual income. Hundreds of requests for additional activities must be refused, but with the active support and assistance of more than a half million sportsmen, results have gradually improved and our sportsmen are proud of their accomplishments, but they realize that in such a thickly populated State as Pennsylvania we can no longer look upon our wild life resources as a food supply, and instead must endeavor to continue a sufficient supply of game of all kinds to serve as an incentive to lure our people into the great out-doors to enjoy a day of wholesome recreation. Our laws have been improved gradually and game of various kinds -- especially our large game -- has increased nicely. During the 1921 season the total weight of game killed in Pennsylvania was almost 5,000 tons. This included almost 5,000 buck deer and over 500 black bears. The value of this meat supply has been estimated at about \$3,500,000. In addition, it is estimated that the value of the furs taken by Pennsylvanians last year was approximately \$2,500,000, or a total of about \$6,000,000 worth of wild life was taken, and this does not take into consideration the far greater value derived from hunting -- recreation from the chase.

FUTURE PROGRAM

It is the intention of the Game Commission of Pennsylvania to continue their various activities along about the same lines as during the last half dozen years. Pennsylvania

sportsmen generally agree that our laws on game, taken as a whole, are about as good as can be desired, and thousands of sportsmen join us in the thought that constant tinkering with the laws relative to taking game is not at all desirable.

There are only about four matters in which our sportsmen are seriously concerned at this time. They, in the order of their importance, are as follows:

1. Legislation that will bring about a better understanding between sportsmen and landowners. This is, or soon will be, one of the biggest questions confronting the sportsmen of many States.

2. Codification of all laws on game into one compact code, with practically no changes in their application.

3. A uniform season for all small upland game for the month of November only.

4. Permit the killing of no deer except with antlers with two or more points to one antler to establish a more desirable breeding ratio, and secure better trophies throughout. Our law now protects does, fawns and "spike" bucks until they have antlers at least four inches long.

SPORTSMEN - LANDOWNERS' PROBLEM

Of the four items mentioned, the sportsmen-landowners' problem is the most serious, and since it affects many of the States here represented, I will discuss it from our view-point in Pennsylvania. In some sections of Pennsylvania, especially near centers of population, the feeling between landowners and sportsmen has become quite acute. This situation has been brought about principally through abuses and misunderstandings, and has also been aggravated by individuals and clubs leasing large tracts for private hunting grounds. There are, I am sorry to say, still entirely too many in our ranks who cannot be classed as sportsmen, but instead are simply "sports," taking what this world has to offer regardless of the rights of their fellowmen or the future. Some of these "sports", many of them native-born Americans too, go upon the property of landowners and commit all sorts of un-called for depredations and abuses, even to the extent of destroying live stock through reckless shooting. The good sportsmen of Pennsylvania deeply deplore this condition, and have through organization and education

corrected many of the conditions heretofore existing. They are willing to take further steps in a legislative way to prevent so far as possible this type of vandalism. On the other hand, many landowners apparently do not appreciate what the true sportsmen of Pennsylvania have been doing for them, and sportsmen owning private hunting grounds are frequently unappreciative of the benefits derived through the activities of the rank and file of the sportsmen. Through the efforts of our sportsmen the landowners of Pennsylvania have derived material benefits as follows:

1. The sportsmen of Pennsylvania, even though they are frequently looked upon as destroyers, have in reality been the real conservators of wild life, and are responsible for the laws on our statute books protecting song and insectivorous birds, and the enforcement of such laws. The protection of such birds has been given the same degree of attention as game birds and mammals ever since the creation of the Game Commission. Since June 1, 1915 the hunters of the State have paid the entire cost of such protection out of their own funds, and the landowners who did not take out hunters' licenses have not contributed a single penny toward this work regardless of the fact that the life-work of the birds makes their crops possible. The sportsmen have also taken an interest in planting thousands of trees, shrubs, etc. to supply food for various birds in order to prevent inroads upon cultivated fruits and berries.

2. Through laws enacted and enforced by the sportsmen, and through re-stocking with game purchased from funds supplied by the sportsmen, the landowners and their children can now hunt for and find a goodly supply of game on their own premises without paying one cent to the fund that makes such conditions possible.

3. Through the Resident Hunter's License Fund the sportsmen since 1913 have paid out in bounties on noxious animals almost \$1,000,000. A large portion of this has gone to the

landowners and their children for the killing of weasels, foxes, etc. which in many cases were dispatched principally to prevent inroads upon their own poultry.

4. Through the efforts of the sportsmen of Pennsylvania, thousands of naturalized foreign-born residents, ignorant of our laws and customs, have been prevented from destroying, through the use of firearms or packs of hungry, mongrel dogs that feed upon the countryside, not only game and wild birds, but domestic poultry and live-stock of various kinds.

5. The rural people of Pennsylvania have benefitted financially through the presence of sportsmen from distant points in their midst, who need to be housed and fed, have their equipment hauled into the hunting territory, also a local market for a great deal of their produce during the hunting season.

On the other hand, as previously stated, the landowners of the State have in many instances not received anything near sportsman-like consideration from hunters, and many unpunished crimes have been committed against landowners and their property. While the organized sportsmen have made an effort to educate their fellow hunters to be up-right, self-respecting citizens who regard the landowners as their hosts in every instance, this effort has not fully corrected conditions. Trespass notices have usually been respected by good sportsmen everywhere, but to many hunters such notices are simply a target to shoot at. In fact, in many instances trespass notices are looked upon as an open invitation to come in and hunt if they want to find plenty of game, with the result that the good sportsmen who regard the wishes of the landowners when lands are posted lose out entirely. Because of this condition, the trespass law does not ordinarily secure the desired protection, and is inimical to the interests of our law-abiding sportsmen.

VALUE OF HUNTER'S LICENSE TAG

The value of Pennsylvania's hunter's license tag has frequently been questioned, and even though the cost of these tags

under our present printing system, is about 3¢ each, the results obtained through this license tag more than justifies it's cost or the slight inconvenience to sportsmen in order to comply with the requirements of the law. In an endeavor to control hunters who would not otherwise conduct themselves properly, the sportsmen prevailed upon our last Legislature to change the position for wearing the tag from the back of the sleeve to the middle of the back principally for the purpose of assisting landowners in apprehending men who commit depredations. When the law required wearing the tag on the back of the sleeve it was invariably worn on the front of the sleeve or an inch or so out of the position in which it was supposed to be, and thus nullified the purpose of the law. The benefits derived from this tag briefly stated are:

1. The good sportsmen of Pennsylvania consider it a badge of honor just as the insignia of any good fraternity is recognized as a mark of distinction, and the law-abiding sportsman has nothing to fear, and with his license tag on the middle of his back flaunts to the world his identification.

2. Through the license tag landowners are given an insurance against depredations that cannot be obtained by any other marker or button. In a State the size of Pennsylvania with 215,000 farms and almost 500,000 hunters this feature alone far overbalances the cost of the license tag, or its inconvenience.

3. The law-abiding sportsmen through the license tag are given an insurance against game law violations that cannot be obtained through a field organization several times as large as we have in Pennsylvania. Many instances can be cited in which serious violations of the law have been apprehended and successfully prosecuted simply because a law-abiding sportsman took the license number of the violator and turned it over to the Department or one of its field officers. The license tag in this respect alone is equal to several times the number of salaried protectors we now have, because there are many thousands of law-abiding sportsmen who see to it that violations are reported immediately.

To summarize the license tag of Pennsylvania in many instances simply adds "men" to "sports" and makes SPORTSMEN out of hunters who would otherwise kill regardless of the future, as well as destroy private property of all kinds to the untold detriment to the cause in which we are interested. The only objections ever raised to this tag in Pennsylvania have come from hunters who did not want their identity known for various reasons, but, frankly speaking, does any State have use for a lot of hunters of this type? From other States where the use of a similar tag has been considered, the principal objections have been the cost of the tags, and the possibility that the tag would be accepted by officers as full evidence that the hunter wearing a certain tag was the owner thereof when in reality it was borrowed from a friend. Very little trouble of this kind is experienced in Pennsylvania, and even though officers should not ask every hunter they see to produce their license certificate, it is beyond question quite desirable to have exposed prima facie evidence that the man is properly licensed. While the license tag does not serve as a cure for all improper conduct, it is of so much value that we would very much dislike to be without it. Maryland has tried the same tag, and as I understand it the Game Department and the sportsmen of that State appreciate its value fully.

SUPPLEMENTAL LEGISLATIVE REMEDY

As a remedy for many of the ills above named, various additional methods have been suggested from time to time. Among others, a law that would prohibit a landowner from posting his property, or if posted would prohibit him, his family or friends from hunting thereon. An arrangement of this kind might prove beneficial in some instances, but is so un-American in principle -- practically be holding a club over the landowners -- that it is the last thing self-respecting sportsmen would desire even though it should be held constitutional, about which there is a grave doubt. This is decidedly not the method by which to overcome the differences between sportsmen and landowners, but there is now a well crystallized sentiment throughout Pennsylvania favoring

the introduction of a bill in the next Legislature that will get to the root of some of this trouble on farm lands. I am confident that the sportsmen, aided by leaders among landowners, will join in drafting and supporting a bill to establish a "safety zone" of 150 yards around all occupied buildings, within which zone they intend making it illegal to hunt for game of any kind with firearms except by special permission of the occupant. In the same bill it is suggested that a specific penalty be imposed upon hunters who leave gates and bars open, break down and destroy fences, or tear down rail or post piles without re-building them in the condition in which they were found, also a specific penalty for persons who carelessly injure live stock. The penalty suggested for a violation of any of the features of the proposed law is \$25.00 for each offense, and by giving every State Policeman, Game Protector, Constable, peace officer, and landowners and their agents power to make arrests without warrant it is believed a great deal will be accomplished. If such legislation can be secured it is the consensus of opinion in Pennsylvania that it will give additional safety to landowners, their families, and their property, and that thousands of acres now closed to legitimate hunting will be thrown open.

The remedies herein suggested will not correct all evils by any means, but should help alleviate the condition. If any State or Province here represented has solved some of these same problems, we in Pennsylvania would be glad to have the benefit of your experience.

N O T E: In order to give the landowners immediate relief and create a better feeling between sportsmen and landowners, a good suggestion for sportsmen's organizations is to offer a cash reward for information that will lead to the arrest and conviction of persons destroying personal property while hunting and give the matter plenty of publicity in the public press and by printed posters.

S.E.G.

COUNTIES CLOSED TO HUNTING.

Notice is hereby given that it is illegal to kill any of the wild game named in the Counties of the State given below, until the regular open season for such game in the State at large for the year set opposite to same. The said Counties have been closed by the Board of Game Commissioners of Pennsylvania to the hunting of the birds and animals named until that time under the provisions and regulations provided for by the Act of April 9th, 1915, Pamphlet Laws 73. The counties closed, the kind of game, and expiration of closed term of each, are as follows:

COUNTY	KIND OF GAME	Season Opens (General Game Season)
Adams	Ring-neck Pheasants	1923
Allegheny	Elk, Deer, Wild Turkeys, Ruffed Grouse, Ring-neck Pheasants, Virginia and Hungarian Quail.	1924
Bedford	Ring-neck Pheasants, Virginia and Hungarian Quail	1923
Berks	Virginia and Hungarian Quail	1923
Blair	Virginia and Hungarian Quail	1924
Bradford	Wild Turkeys	1923
Bucks	Deer, Wild Turkeys, Ring-neck Pheasants, Ruffed Grouse, Virginia and Hungarian Quail	1923
Cambria	Wild Turkeys, Virginia and Hungarian Quail	1923
Cameron	Ring-neck Pheasants	1923
Carbon	Virginia and Hungarian Quail	1923
Chester	Ring-neck Pheasants, Virginia and Hungarian Quail	1923
Columbia	Wild Turkeys, Virginia and Hungarian Quail	1923
Crawford	Virginia and Hungarian Quail	1923
Franklin	Ring-neck Pheasants	1923
Huntingdon	Ring-neck Pheasants	1923
Lancaster	Ring-neck Pheasants	1923
Lehigh	Ring-neck Pheasants, Virginia and Hungarian Quail	1923
Lycoming	Ring-neck Pheasants, Virginia and Hungarian Quail	1923
Mercer	Deer, Ring-neck Pheasants, Virginia and Hungarian Quail	1923
Montgomery ...	Deer, Wild Turkeys, Ruffed Grouse, Ring-neck Pheasants, Virginia and Hungarian Quail	1923
Montour	Virginia and Hungarian Quail	1923
Northampton ..	Virginia and Hungarian Quail	1923
Pike	Wild Turkeys, Virginia and Hungarian Quail	1923
Schuylkill	Deer	1923
Somerset	Ring-neck Pheasants, Virginia and Hungarian Quail	1923
Susquehanna ...	Deer and Ring-neck Pheasants	1923
Tioga	Wild Turkeys, Ring-neck Pheasants	1923
Venango	Virginia and Hungarian Quail	1923
Warren	Ring-neck Pheasants, Virginia and Hungarian Quail	1923
Washington	Ring-neck Pheasants	1923
Westmoreland .	Ring-neck Pheasants, Virginia and Hungarian Quail	1923
York	Ring-neck Pheasants	1923

The penalties for killing any of the above birds or animals in closed territory are from \$25.00 up to \$300.00. as specifically fixed by the Act above referred to. Many of these counties have been stocked with the game so protected, while in other cases the native stock can be replenished only by closing for a period, and we ask that you not only observe this law yourself, but that you help to have the law obeyed by others so that such game may increase to the benefit of all sportsmen.

REMEMBER THAT THE ABOVE NOTICE CONTROLS THE SEASON IN THESE COUNTIES FOR THE GAME NAMED, and that the summary as given on the back of your Resident Hunter's License applies to the State at large, and does not apply to these Counties.

BOARD OF GAME COMMISSIONERS,

SETH E. GORDON, *Secretary.*

Harrisburg, Pa., Sept. 1, 1922.

200M.

OFFICE OF THE
BOARD OF GAME COMMISSIONERS
Harrisburg, Pa.

GENERAL GAME FORECAST

While it is difficult to forecast with any degree of accuracy what game conditions will be during the hunting season, since much depends upon weather conditions, food conditions, etc., according to recent reports received by the Game Commission from all parts of the State the 1922 hunting season taken throughout will probably be the most successful Pennsylvania sportsmen have ever enjoyed.

ACTIVITIES SINCE 1915.

Since June 1, 1915, the Game Commission has operated entirely on funds supplied by the sportsmen of the State, and an effort has been made to spend every penny of that money to the best advantage possible. The first principle of wild life conservation is protection of the native breeding stock, which means not only the enforcement of the game laws but destroying vermin, feeding game in the winter time, restocking, etc.

The maintenance of the field organization of Game Protectors, maintenance of game refuges, employment of refuge keepers, employment of special officers in the fall, feeding of game and similar activities have taken up a large portion of the funds paid in by the sportsmen, but since 1915 a total of almost \$1,000,000 has been paid out in bounties on vermin of various kinds, \$275,000 for the purchase of game, \$45,000 for expressage, \$125,000 for the purchase of lands for refuges, and many other activities requiring lesser expenditures.

Almost \$300,000 of the amount paid out for bounties was paid through the Auditor General's Department under the provisions of the Bounty Act of 1913 for which we have no record of the animals killed, and the balance of it was used to pay bounties through this office on more than 3,000 Wild Cats, 53,000 foxes, 26,000 minks (now off the bounty list), and 315,000 weasels. In

addition, the sportsmen killed thousands of these various animals that were never presented for bounty.

Since 1915 we have secured and stocked, in round numbers, game as follows:

Elk.....	170
Deer.....	780
Wild Turkeys.....	2,000
Ring-neck Pheasants.....	31,000
Ring-neck Pheasant Eggs.....	72,600
Rabbits (Cotton-tail).....	40,000
Varying Hares (Snow-shoe rabbits).....	10,000
Quail, Bob-white.....	31,600
Quail, Gambel.....	180
Squirrels, fox.....	55
Beaver.....	70

The majority of the various species purchased were obtained during the past two years.

The number of game refuges has been increased from six (6), the number established prior to 1915, to a total of thirty (30), with three (3) more refuges under way. Five (5) of these refuges have been purchased and established and will be the property of the sportsmen forever. The three additional tracts now under contract will cost approximately \$50,000.

The total expenditures for all these activities have been keeping pace with the annual income. In other words, the Game Commission has been doing everything within its power with the funds available, and indications are that the number of refuges cannot be materially increased, due to the annual maintenance cost. Hundreds of requests for additional activities must annually be refused.

With the foregoing activities on the part of the Game Commission, and the concerted active support and assistance of more than a half million sportsmen, results have gradually improved, and, even though conservation problems are always long-term questions, the sportsmen of the State can well be proud of what they have accomplished in a comparatively short time.

GAME CONDITIONS

According to reports received from all sections of the State, as well as personal observations, we believe conditions as they apply to various species at this time are as follows:

DEER: Deer have increased very rapidly throughout the entire State through the establishment of new refuges and restocking sections that were looked upon as entirely "shot out", and will supply good deer hunting this year. The old established deer territory of the State will furnish better sport than ever. Indications are that very few hunters will kill spike bucks this coming season. Hundreds of camps last year passed resolutions against killing spike bucks, and the balance of the camps will undoubtedly do likewise before the opening of the season. The total kill for 1922 may reach 7,000 bucks, if weather conditions are favorable which would be an increase of approximately 2,000 over the 1921 season.

ELK: Elk seem to be increasing in several sections of the State, although continually causing considerable annoyance to property owners in other portions of the State.

BEAR: Reports indicate that bears have increased quite rapidly. Twenty-two bears were trapped in Potter county for stocking purposes during the past two seasons, and we need fully twenty more to stock other sections suitable to these animals. The provisions relative to killing bears in Potter county during 1921 will continue during 1922. This means any individual may kill an unlimited number of bears in Potter county during the open season, or he may kill a bear in any other county in the State and still go to Potter county and kill any number. Hunting parties are restricted to three bears per party or camp. We had record of 510 bears killed last season, and with favorable weather conditions the 1922 kill should be considerably in excess of this number.

RABBITS: Rabbits are said to be the "bread of the forest" for all kinds of vermin. Killing off thousands of weasels, foxes, and wild cats has helped the rabbits materially. Of the 40,000 rabbits stocked since 1915, 35,000 of these rabbits were stocked during the last two years throughout the southern and more thickly populated sections of the State to supply hunting

near centers of population. Reports from all over the State indicate that rabbits are more plentiful than for many years past.

SQUIRRELS: Reports indicate that squirrels are again increasing, due largely to the later open season on these animals, and our present supply of squirrels should furnish excellent sport this fall. In some sections squirrels should not be killed in excessive numbers until they make further recovery from losses during the winter of 1919 and 1920.

WILD TURKEYS: Reports indicate that these birds are increasing. The hatching and rearing season was quite favorable and there will be fully as many or more turkeys in most sections of the State than last season. The success of the season will depend somewhat on weather conditions. Pennsylvania is one of the few States in the Union that can boast of these splendid game birds in worth-while numbers, and so long as the sportsmen will continue feeding them during the winter time, hunting them with-in reason during the open season, help us stop poaching before season and help stop calling contrary to law, they will undoubtedly continue to increase quite rapidly.

RUFFED GROUSE: Reports indicate this "king of American game birds" is again gradually increasing throughout the State. In some sections they were so reduced in numbers about 1917 that no perceptible increase has been noted, but with careful protection and continued conservative killing on the part of the sportsmen and keeping out forest fires the ruffed grouse will again become fairly plentiful and supply good shooting for many years to come. Hundreds of sportsmen throughout the State during the past several seasons have refrained from killing these birds at all, while others kept well below the legal limit now allowed by law. None of these birds can be purchased for stocking purposes, and the only thing to do is to take the utmost care of our seed stock.

RING-NECK PHEASANTS: Ring-neck pheasants are apparently increasing in many sections of the State where they have been

stocked in sufficient numbers to get a good start, and in counties open to shooting these birds will undoubtedly supply some shooting, but the sportsmen generally are making an effort to conserve these birds.

QUAIL: Of the 31,600 quail stocked since 1915, more than 25,000 of these birds were stocked during the past two springs. Reports indicate that quail are found almost everywhere throughout the lower half of the State. This condition is due almost entirely to the re-stocking and feeding work done by the Game Commission and interested sportsmen, assisted by land owners, during the last half dozen years. This past spring no quail were stocked anywhere except on lands that would be open to shooting within reason. These birds have been purchased from funds paid in by the sportsmen of the State, and there is no reason why they should not enjoy a reasonable amount of recreation and sport in hunting for them during the regular open season. The sportsmen have been taking an active interest in not only feeding coveys of quail during the winter time, but also trapping, intermixing, and pairing off birds that are left over. Reducing vermin has also helped materially.

MIGRATORY BIRDS: Reports indicate that Pennsylvania sportsmen, with favorable weather conditions, will enjoy better migratory bird shooting than for many years past. Last year was the best season for wild water-fowl Pennsylvania has enjoyed for fifteen or twenty years. The same condition applied to woodcock, but the reedbird shooting was not so good as years ago due to reduced marshes, etc. Blackbirds are now being killed by the thousands in some sections.

ISSUANCE OF HUNTER'S LICENSES: The 1922 hunter's licenses are being issued quite rapidly. Sportsmen are urged to get their licenses at the earliest date possible and reduce congestion in the office of the County Treasurer. Indications are that probably 500,000 of these licenses will be issued this year.

Several arrests have already been made for failure to display the license tag properly while hunting for blackbirds. The provisions of law relative to displaying the license tag and carrying the license on the person are being strictly enforced as a protection to law-abiding sportsmen and property owners of the State.

Respectfully submitted,

Aeth Gordon
Secretary, Game Commission.

GM.

Harrisburg, Pa.
August 10, 1922.

P E N N S Y L V A N I A ' S G A M E P R O G R A M

Presented before The Delegates representing all phases of conservation assembled at State College, Pennsylvania, March 30th and 31st, 1922, for the purpose of organizing a State Conservation Council, and to decide upon a general conservation program.

Due to the interest manifested in this paper, a number of copies have been made, and a copy is sent to you in the hope that the material therein contained will be of service to you in furthering the cause of wild life conservation in your vicinity.


Secretary, Game Commission.

Harrisburg, Pa.
March 31st, 1922.

CONTENTS

	<u>Page</u>
1. Creation of Game Commission, term of service, etc.	1 to 3
2. Appropriations to Game Commission, 1897 to 1913, inclusive.....	3
3. Hunting licenses issued, 1913 to 1921, inclusive..	4
4. Bounties paid since 1913.....	4
5. Increase in kill of game and value.....	5
6. Field organization and prosecutions, 1920 and 1921.....	5 to 6
7. Game Refuges.....	7
8. Stocking of game.....	8
9. Future Program.....	8 to 9
(a) Sportsmen-Landowners Problem.....	9 to 12
(b) Codification of laws.....	12
(c) Legislation to which sportsmen may object..	12 to 13

P E N N S Y L V A N I A ' S G A M E P R O G R A M

BY

SETH E. GORDON
Secretary, Game Commission

Mr. Chairman and Fellow Conservationists:

The subject that has been assigned to me, like all conservation problems, is so large that it cannot be covered thoroughly in the brief space of time available. Since there are several Members of the Board of Game Commissioners present, I will discuss most of the various questions briefly and leave sufficient time for further enlightenment on any phase by said Members of the Board if they desire.

CREATION OF GAME COMMISSION

To give this discussion a proper setting, it will be necessary to give a brief resume of the work of the Board in the past. This Board, as most of you know, was established by the Legislature in 1895 at the instance of sportsmen's organizations, especially the Pennsylvania State Sportsmen, founded in 1890, here represented by several delegates. The sportsmen at that time realized that in order to hand down to posterity some of the things they were enjoying, it would be necessary to band together if they hoped to bring about desired results, and after five years of effort the Legislature was prevailed upon to pass the law establishing the Board of Game Commissioners. No appropriation of any sort was made by the Legislature of 1895 for the use of the Board, and after the Governor had appointed six prominent sportsmen to compose the Board, they experienced a great deal of difficulty in finding someone capable who was willing to take up the herculean task then confronting them without a salary. Finally one of the leading sportsmen in the movement to establish the Board was prevailed upon to undertake it, and for six successive years that nestor of Pennsylvania sportsmanship, Dr. Joseph Kalbfus, faithfully and fearlessly discharged his duties without a single cent of remuneration; for many years thereafter he received a very meager salary, and at no time received a salary in keeping with the duties devolving upon him. As a closing chapter to his brilliant career, Dr. Kalbfus on August 10th, 1919 sacrificed his very life for the cause we here represent today.

MEMBERS OF BOARD AND DUTIES

The Board of Game Commissioners has always been a select body of sportsmen of the highest type. The present Board consists of six experienced, successful, business and professional men who have had a varied experience in all sorts of sportsmanship in various parts of the United States, and a number of them in foreign countries. The Members of the Game Commission do not now and never have received a single cent of remuneration for their time and expenses, although on many occasions Members have traveled half-way across the Continent at their own expense to attend Board meetings. In addition they have spent large sums of money out of their own resources to further the cause they represent.

The Board of Game Commissioners is not a supervisory body, but an Executive Board, and are the sole governing power of the Department. The personnel of the present Board is the equal of, and I believe superior to, any other Board in Pennsylvania; the collective judgment of such a Board is of inestimable value to the cause of wild life conservation in Pennsylvania. The services of none of the present Members could be secured for any pecuniary consideration to do the work they are now doing gratis. Until recently Pennsylvania had the only organization of this kind in the United States in charge of game and wild bird protection, but a number of States are now adopting our plan of organization and their methods. In a number of other States, officials in charge of wild life conservation are not appointed by the same method or controlled by the same motives that govern in Pennsylvania, and the results are frequently very unsatisfactory.

The Game Commission has been successful in gradually moulding public sentiment in favor of law observance, feeding of wild life, etc., and instead of our field officers being regarded as imposters in all parts of the State as they were in the beginning, they are now respected and their work thoroughly appreciated.

TERM OF SERVICE

Under the present law, Members of the Board are appointed for a period of three years, which period, in the opinion of most sportsmen, is entirely too short. The appointments of two Members expire each year, and since wild life conservation is not a matter of three, five, or even ten years, the terms for Members of the Board should, in my judgment, be materially increased so as to guarantee a continuity of policy.

Fortunately for the sportsmen of the Keystone State, Dr. Charles B. Penrose, the President, has served continuously since February, 1899; Mr. John M. Phillips, Vice President, since November, 1905; Mr. W. B. McCaleb, since February, 1911; Mr. John S. Speer, since December, 1914, with a gap of almost two years in his services because of change of administrations; Dr. H. J. Donaldson, since November, 1916; and Mr. William S. Ellis, since January, 1920. From this you will note that the majority of the Members of the Board have served continuously over a comparatively long period of years, but increasing the length of the term of appointment would always tend toward stabilization and continuity of policies - something absolutely necessary in any conservation work.

APPROPRIATIONS TO GAME COMMISSION

Appropriations made to the Game Commission from general funds of the Commonwealth from 1897 to 1913, inclusive, were as follows:

1897.....	\$ 800.00	{ Postage and
1899.....	800.00	{ expressage only}
1901.....	3,000.00	
1903.....	12,000.00	
1905.....	20,000.00	
1907.....	40,200.00	
1909.....	60,200.00	
1911.....	55,200.00	
1913.....	97,400.00	

Securing funds necessary to operate the Department successfully always gave interested sportsmen and the Game Commission deep concern, because the demands of public schools, hospitals, highways, etc. apparently were always given preference, with the result that the amount appropriated to the Game Commission from general funds entirely inadequate. Finally the sportsmen of the State decided to support a Resident Hunters' License law and were successful in having the present license law passed by the 1913 Session of the Legislature. The funds paid in through this Act were accumulated in the State Treasury until June, 1915. Since that time the entire cost of the work of the Game Commission, including the payment of bounties by the Game Commission since April 15th, 1915 amounting to almost \$600,000.00 (including reimbursement of counties for bounties paid from July 25, 1913 to April 15, 1915, amounting to \$287,465.00), the purchase of lands for game refuge purposes in sections far remote from State forest lands amounting to approximately \$125,000.00, and all other activities of the Department has been paid out of funds collected through the Hunters' Licen-

se. Act and penalties and fees of various kinds. The disbursements for general purposes, bounties, etc. have run anywhere from \$225,000.00 to \$665,000.00 per year, and the Department at the present time requires an average of about a half million dollars per year to conduct its many activities. The budget of the Game Commission for the 1922 fiscal year amounts to about \$530,000.00.

LICENSES ISSUED

Hunters' licenses issued since the passage of the Resident Hunter's License Act have been as follows:

<u>YEAR</u>	<u>RESIDENT</u>	<u>NON-RESIDENT</u>
1913	305,028	(Data not tabulated)
1914	298,972	462
1915	262,355	532
1916	290,422	662
1917	315,474	588
1918	311,290	478
1919	401,130	1128
1920	432,240	1725
1921	462,374	1763

The County Treasurers over the State receive 10% of the resident license fee and 5% of the non-resident license fee. Indications are that the issuance of licenses for 1922 will run somewhere between 475,000 and 500,000.

PAYMENT OF BOUNTIES

The bounty system now in use in Pennsylvania is the only system of its kind in the United States. The payment of bounties is now so safeguarded that large frauds are a matter of the past. The results obtained apparently have been entirely satisfactory. From the 15th day of April, 1915 to March 1st, 1922 bounties paid by the Game Commission by fiscal years have been as follows:

<u>YEAR</u>	<u>WILD CAT</u>	<u>GRAY FOX</u>	<u>RED FOX</u>	<u>MINK</u>	<u>WEASEL</u>	<u>AMOUNT PAID</u>
1916 ^o	862	5,124	5,335	4,845	39,111	\$ 70,046.00
1917	393	3,734	3,336	5,846	44,720	66,614.00
1918	315	3,310	2,810	4,328	28,631	47,089.00
1919	442	4,474	4,246	5,189	34,625	69,290.00
1920	314	4,527	2,295	2,253	53,873	125,184.00
1921	308	3,372	3,375	3,753	59,755	128,269.50
1922 ^{oo}						
to date	231	3,319	2,424	6	37,079	69,387.00
TOTALS	2865	27,860	23,821	26,220	297,794	\$575,879.50

Amount paid to counties to reimburse them for bounties paid under 1913 Act.....\$287,465.00
Total amount paid in bounties since 1913..\$863,344.50

^oIncludes bounties paid from April 15, 1915 to December 1st, 1916.

^{oo}Includes bounties paid during months of December, 1921, and January and February, 1922.

The advisability of continuing the payment of bounties on wild cats, foxes and weasels is readily apparent and no further comment is necessary.

GAME KILLED

The sportsmen of the State have become educated to the fact that with such a large army of hunters we cannot hope to look upon our wild life resources as a food supply, as was the case when our ancestors came to America, but instead we will be accomplishing all that can be expected under present day conditions if we are successful in continuing a sufficient supply of game of various kinds to serve as the incentive to lure our people into the great out-of-doors to commune with Nature and enjoy a day of wholesome recreation and sport. The laws protecting wild life have gradually been improved, and game of various kinds - especially our large game - has increased nicely. As a matter of comparison, I call your attention to the figures on the kill of deer and bear in Pennsylvania since 1907 as follows:

	<u>1907</u>	<u>1915</u>	<u>1918</u>	<u>1919</u>	<u>1920</u>	<u>1921</u>
Bear.....	200	188 ^{oo}	387	472	420	510
Deer.....	200 ^o	1287	1754	2939	3300	4840

^o Male deer of all ages - the first year for the killing of bucks only in Pennsylvania.

^{oo} First season trapping was prohibited and number limited to one to each person.

The annual kill of small game varies considerably, depending upon climatic conditions, food conditions, etc., but, according to the best figures we have been able to obtain, the total weight of game killed in Pennsylvania in 1921 is almost 5,000 tons. The value of this meat supply at present food prices would aggregate at least three and a half million dollars (\$3,500,000.00), and the value of furs taken by Pennsylvanians each year it is estimated amounts to about two and a half million dollars (\$2,500,000.00), or a conservative estimate of the annual value of the kill of wild life in dollars and cents is at least six million dollars (\$6,000,000.00) without giving any consideration whatever to the value of hunting to our citizens - something that cannot be computed in dollars and cents. In addition to all this we have the benefit of the lifework and cheery song of our song and insectivorous birds, the enormous value of which to our general well-being cannot be accurately estimated.

FIELD ORGANIZATION

In 1913, when the writer became connected with the Game Commission, there were only twenty (20) Game Protectors in the entire State, eighteen (18) of whom were regularly in the field. We also had six (6) game refuge keepers. Today we have in Pennsylvania sixty-four (64) Game Protectors for the sixty-seven (67) counties, six (6) Assistant Game Protectors, thirty-two (32) game refuges, thirty-one (31) of which will have officers in charge be-

fore the 1922 hunting season, one (1) Game Protector who is designated as a trapping instructor and devotes practically all of his time to that work, and 10 Traveling or Supervising Protectors, each in charge of all field activities of the Department in his district. During the past two fiscal years, 1920 and 1921, prosecutions passing through the Department have been as follows:

Prosecutions made during 1920 fiscal year (Dec. 1, 1919 to Nov. 30, 1920)

Prosecutions by officers on regular pay roll.....	1339
Prosecutions by Special Deputy Game Protectors (50% while under pay).....	295
Prosecutions by local police officers, constables, and individuals.....	180
Prosecutions by State Police.....	81
Total.....	1895 ^x

^x Above includes 144 fish cases prosecuted by Game Protectors.

Prosecutions made during 1921 fiscal year (Dec. 1, 1920 to Nov. 30, 1921)

Prosecutions by regular salaried officers.....	1797
Prosecutions by Special Deputy Game Protectors without division of penalties.....	417
Prosecutions by Special Deputy Game Protectors receiving half of penalty collected.....	344
Prosecutions by State Police.....	113
Prosecutions by other peace officers.....	173
Prosecutions by individuals.....	40
Total.....	2884 ^x

^x Above includes 233 fish law cases prosecuted by Game Protectors.

In 1919 the Game Commission collected and deposited in penalties, propagating license fees, etc., exclusive of hunters' licenses, \$29,014.06; in 1920, \$55,278.62; and in 1921, \$69,963.25.

The State Police are assisting us wherever possible, and have each year prosecuted a number of game law violations for us. We also have the hearty co-operation of the officers of the Department of Fisheries and Department of Forestry.

The field force of the Game Commission, as you will note from the above, has during the last several years made a special effort to co-operate with the Department of Fisheries in the enforcement of their law, and each of our salaried officers is a Fire Warden and is assisting the Department of Forestry in the prevention and extinguishment of forest fires. Our officers have also assisted the Secretary of Agriculture in a material way to secure proper observance of the Dog License Law. From the above you will note that we are doing everything within our power to co-operate with other departments, and are in return receiving valuable support from them.

GAME REFUGES

The system of game refuges, as established in Pennsylvania, is serving as a model for many other states. This plan is being copied everywhere. In 1913 we had only six (6) game refuges; now we have thirty-two (32). Of these thirty-two (32) game refuges now under our control, twenty (20) of them are on State forest lands, five (5) on lands leased for a long term of years, and seven (7) on lands purchased from the sportsmen's funds for that purpose. The area within the refuges now under our control is about 75,000 acres, and the balance of about 135,000 acres under our control is open to hunting. In addition the Forest Department owns about 1,150,000 acres all open to hunting. Each refuge has plenty of free shooting ground around it.

Indications are that we will be unable to increase the number of game refuges very materially because the present available annual revenue will not permit us to assume additional annual liabilities and at the same time conduct other phases of the work on anything like the scale that has prevailed during the last three years. The game refuge system of Pennsylvania is a most important factor in wild life conservation and should be extended if possible.

We also have eight (8) auxiliary game refuges, ranging in area from 300 acres up to 2,000 acres, on which the hunting rights are given to the Commonwealth for a term of ten or more years so that a portion may be set aside as a refuge and the balance left open to hunting. The Board at this time deems it inadvisable to take up for this purpose tracts of land of less than 1,000 acres so that a refuge of reasonable size may be set apart and leave sufficient public shooting ground. Although the cost of these refuges to the Department is negligible, the administration of them is quite a problem. They are, however, producing splendid results, and in some cases we have been able to trap off more than 200 rabbits in a single season to be used for stocking purposes in surrounding territory.

Due to the regrettable and rapidly growing tendency of sportsmen who are financially able to club together and buy up or lease extensive tracts of wild lands to create private preserves, whereon only they and their invited guests hunt, and all other sportsmen are excluded, it is imperative that the State take steps to purchase, as quickly as possible, upwards of 5,000,000 acres of available wild land, not only to supply territory for game refuges and plenty of free public shooting and recreational grounds, but also much needed protection for our watersheds and future forests.

STOCKING OF GAME

While the protection and increase of our native game birds and animals is of paramount importance, as desirable game of no kind is available in large quantities, the Game Commission has since 1915 stocked as much game of various kinds as has been available. Increasing our stock of game by restocking is not only slow and difficult, but quite expensive. Prior to May 1st, this year, which is about the average, we will complete the distribution of game approximately as follows:

Deer.....	75
Wild Turkeys.....	75
Ring-neck Pheasants....	2,500
Bob-white Quail.....	10,000 to 15,000
Varying Hares.....	3,000
Cotton-tail Rabbits....	18,000

This game, however, is merely a "drop in the bucket" in comparison with what can be accomplished in protecting properly our native stock. The stray, half-starved dog, the wild field-hunting house cat, vermin and poachers destroy ten times the amount of game we can possibly stock in any one year. Sportsmen can do more by stopping this awful loss than all the restocking that can possibly be done.

FUTURE PROGRAM

As I understand it, the present intention of the Game Commission is to continue their various activities in about the same manner as above outlined, providing no legislation interfering with such plans is passed. It is the general consensus of opinion that our laws on game today, taken as a whole, are about as good as could be desired, and many sportsmen join us in protesting bitterly against constant tinkering with the game laws. However, if the Legislature insists on making minor changes here and there, the sportsmen for their own protection must take a hand in the matter and see to it that the general structure is improved and not impaired.

If any desirable legislation affecting sportsmen is to be considered this coming session, I give below four (4) matters for consideration in the order of their importance as follows:

1. Legislation that will bring about a better understanding between sportsmen and land-owners.
2. Codify all game laws into one compact code, with practically no changes whatever in the application of the law.
3. A uniform season for all small upland game, including woodcock and rabbits, for the month of November only.

4. Prohibit the killing of buck deer until they have antlers with two or more points to one antler, to establish a more desirable breeding ratio and save a lot of small bucks killed illegally each season.

The first of these items is very important. Suggestions on these questions, according to the sentiment of thousands of sportsmen so far consulted, are as follows:

SPORTSMEN - LAND-OWNERS PROBLEM: This is one of the most difficult problems confronting the sportsmen of Pennsylvania today, principally because of abuses and misunderstandings, and considerably aggravated by the purchase of large tracts of wild lands by clubs and individuals for private hunting grounds. In the first place, there are unfortunately entirely too many in our ranks who cannot be classified as sportsmen, who go upon the property of land-owners and commit all sorts of uncalled for depredations and crimes too numerous to mention. The good sportsmen of Pennsylvania deeply deplore such actions and desire such vandalism prevented if at all possible. On the other hand, many land-owners do not appreciate what the true sportsmen of Pennsylvania have done for them; sportsmen owning private enclosed preserves are frequently unappreciative of the benefits derived through funds contributed by the sportsmen generally. Briefly enumerated, through the efforts of our sportsmen, the land-owners have been securing material benefits, as follows:

1. The sportsmen of the State are responsible for all the laws on our statutes protecting song and insectivorous birds, and their enforcement. No land-owner, or anybody else, unless he was also a sportsman, ever turned a hand to secure legislation protecting beneficial birds. The protection of song and insectivorous birds, ever since the creation of the Game Commission, has been given the same attention as the protection of game birds and animals. The sportsmen since June 1, 1915 have been paying the entire cost of such protection out of their own funds, and are not asking a cent in return for services rendered. The life-work of the birds, protected by the hunters of the State, makes possible the crops of the farmers.

In addition to protecting these beneficial birds, through the efforts of the Game Commission and interested sportsmen thousands of trees, shrubs, etc. bearing food for birds have been planted to supply plenty of desirable food and thus prevent inroads upon the cultivated fruits and berries of the land-owners, the persons who derive the greatest benefit from their life work.

2. Through the hunters' license fund, the sportsmen since July, 1913 have paid out in bounties on noxious animals of various kinds more than \$860,000. A large portion of this enormous amount has gone to the land-owners and their children for the killing of weasels, foxes, etc., which in the majority of instances were dispatched principally to prevent inroads upon their own poultry. The land-owners and their children

in turn have not been asked to contribute a single cent to the fund from which this bounty was paid unless they saw fit to hunt beyond a given area.

The payment of bounties also helps privately controlled preserves by the destruction of vermin which would otherwise destroy the game they desire to retain for their exclusive enjoyment.

3. Through laws enacted and enforced by the sportsmen, and through restocking game with the funds supplied by sportsmen, land-owners and their children now can hunt for and find a reasonable supply of game on their own premises, without paying one cent to the fund for such restocking and protection that made such conditions possible.

4. Through the resident hunter's license tag, the land-owners of the State are securing an insurance against depredations on their property that could not be obtained from any other source, the value of which protection cannot be estimated in dollars and cents.

5. Through the efforts of the sportsmen the aliens in our midst, ignorant of our laws and customs, are prevented from hunting or owning firearms or packs of hungry worthless dogs to feed on the countryside, and land-owners, especially farmers near industrial and mining centres, receive protection impossible fifteen years ago, as was then everywhere evidenced.

The land-owners, through the sportsmen of the State, are also benefitting financially through boarding sportsmen, hauling their equipment into the hunting territory and out again, a local market for their produce, etc. On the other hand, as above stated, the land-owners of the State have in many instances not received anything near sportsman-like consideration from the hunters, and depredations, thefts, and other serious crimes have been committed against land-owners and their property. The good sportsmen of the Commonwealth have made an effort to educate their fellow-hunters to be up-right, self-respecting citizens who would regard properly the rights and wishes of land-owners, which effort has not fully corrected conditions.

Trespass notices have usually been respected by our good sportsmen everywhere, but are simply a joke to many hunters; in fact trespass notices are frequently regarded by men not classed as sportsmen as an invitation to hunt on such lands if they want to find plenty of rabbits, etc., and the good sportsmen lose out because they respect the land-owner's wishes. Because of this condition, it is my opinion that the trespass law does not ordinarily secure the desired protection, and is usually inimical to the interests of our good sportsmen. In an endeavor to control hunters who do not conduct themselves properly, the sportsmen prevailed upon the last Legislature to change the position

for wearing the license tag to the middle of the back, largely for the purpose of assisting land-owners in apprehending men who commit depredations. This has aided considerably but is still insufficient.

As a legislative cure for these ills, various methods have been suggested from time to time, among others, a law that would prohibit a land-owner from posting his property, or if posted would prohibit him or his family or friends from hunting thereon. Most of us agree that while such arrangement might prove beneficial, it would be un-American and would practically be holding a club over the land-owners, which is the last thing self-respecting sportsmen would desire. Even though such legislation might be held to be constitutional, which is very doubtful, it is decidedly not the proper method by which to overcome the existing gap between sportsmen and land-owners. After consulting with a large number of sportsmen and landowners throughout Pennsylvania, I am confident the sportsmen will introduce a bill in the next Legislature that will get to the root of most of this trouble on farm land by controlling persons responsible for depredations. A brief outline of the legislation in mind, according to the best information I am able to gather, is about as follows:

1. Establish a safety zone of 150 yards around all occupied buildings, within which zone it would be illegal to hunt for game of any kind with firearms, except by special permission of the occupant.

2. Impose a specific penalty upon hunters who leave gates and bars open, break down and destroy fences, or tear down rail piles, stone piles and stone fences without rebuilding them in the same condition in which they were found, also a specific penalty for persons who through carelessness injure live-stock. The majority of sportsmen with whom I have consulted favor a penalty of about \$25 for a violation of any of the matters above mentioned, and give any State policeman, Game Protector, Constable or other peace officer (and probably any land-owner or occupant, or his agent) power to make arrests without warrant, the penalties to be deposited in the local school fund, the county fund, or the general fund of the Commonwealth, preferably the county fund.

It has also been suggested that a small penalty, say \$5 or \$10, be imposed upon men who unnecessarily tramp across unfrozen wheat fields during the fall of the year. Whether this is advisable is a debatable question; nevertheless, it is believed that an act of the kind above outlined will produce the same salutary results that the two 1921 acts controlling shooting did, especially if it is printed in the game law pamphlet and given widespread publicity through the public press. Conservative sportsmen all agree that this will guarantee a protection to the land-owners of the Commonwealth, that it will no longer make it imperative for

them to post their entire farms against trespassing - which method as before stated is not at all successful - in order to secure a reasonable degree of safety to themselves, their families and their property, and that as a result thousands of acres now posted will be thrown open to hunting. This would not, however, improve the situation with reference to privately controlled hunting grounds.

CODIFICATION OF LAWS: If this subject is to be considered, the bulk of our present game law pamphlet can be reduced from 35 to 40 pages. While this is being done, it has been suggested that the following slight changes be made.

1. Change the hunters' license year so that it will expire April 30th instead of December 31st, and then require the wearing of the license tag when hunting for birds and animals, game or otherwise, by any method. This will take away the present inducement for men to try and evade the law, claiming they are hunting for animals not classed as game.

2. Prohibit boys under 17 years of age to hunt, except when accompanied by a responsible adult, unless on lands upon which they reside as a member of the family cultivating same.

3. Increase the non-resident hunter's license fee to \$15 instead of \$10 as at present.

4. Provide for a uniform season for all small game for November only, including woodcock and rabbits.

5. Prohibit the killing of deer except bucks with two or more points to one antler, regardless whether such animal has an antler on the other side or not.

6. prohibit the sale of game of any kind except rabbits killed in other States and shipped into this State, and raccoons.

7. License fur buyers so as to protect our rural people against unscrupulous fur buyers, also require sworn report of skins purchased before renewal.

8. Many sportsmen suggest that the woodchuck be given the same protection now accorded skunks and muskrats with a slightly different season, largely because the woodchuck is the home-builder for the rabbit. After consulting with many sportsmen, I believe it would be advisable to give this matter serious consideration.

LEGISLATION TO WHICH SPORTSMEN MAY OBJECT

The Re-organization Commission has been carefully studying the operation of the various Departments of the State Government and will undoubtedly bring about desirable improvement in various activities if their recommendations are adopted by the next Legislature. Through the public press sportsmen have been informed, although I have nothing officially on the subject, that said Commission will probably recommend two changes in which the sportsmen of the State are vitally interested. The first is

the possibility of having the hunter's license funds, and all other special or "ear-marked" funds, deposited in the general fund of the Commonwealth, requiring the sportsmen to go before the Legislature at each session and ask that body to appropriate to the Game Commission the funds deposited by the sportsmen. It is claimed, I believe that pooling all "special funds" in the Treasury is necessary in order to establish a workable budget system for the Commonwealth. The Re-organization Commission has already been informed the conditions under which the resident hunters' license act was passed; namely, that the sportsmen of the State were solemnly promised that their funds would always be kept in a special fund separate and apart solely for their work so that not a single cent could be used for any other purpose. Hundreds of sportsmen take the position that this should be continued, and that they should not take a chance on having their work hampered in any way.

The second is, I am also informed through the public press, that the Re-organization Commission may recommend the increase of the State police force and dispense with the services of a large part of the field organizations of the Game Commission, the Department of Fisheries and the Department of Forestry. The Commission has been advised that while the State Police are a splendid organization and deserve the support of our good citizens everywhere, the work of enforcing laws protecting game and wild birds means not only an exercise of police powers, but that our field representatives devote fully 75% of their effort along educational lines, the balance a reasonable exercise of our police powers. If such change were made a goodly number of our officers would still be necessary to look after the stocking of game, feeding of game in the winter time, and many other activities of the Department that a State policeman could not undertake.

I am pleased to report that the sportsmen generally are heartily supporting the work of the present non-salaried, non-political Game Commission; and apparently want that work to continue indefinitely along the present lines unhampered in any way. All of these are matters for your consideration, and such concerted action as the delegates here assembled may see fit. I regret that it has been necessary for me to consume so much of your time in order to give you a proper understanding of the various issues confronting the sportsmen of Pennsylvania, and hope that the matters presented will be freely discussed by the delegates present. I thank you.

THE BUCHANAN FOREST DISTRICT.

BUCHANAN STATE FOREST DISTRICT

This District Comprises:

26 townships in Bedford County.

11 townships in Fulton County.

9 townships in Franklin County.

1 township in Huntingdon County.

The total acreage is 501,000 acres of private forest land, and 22,570 acres of State Forest land. In the District are four steel forest fire observation towers. They are:

Tuscarora Tower -- elevation 2,440 feet above sea level; located on Tuscarora mountain, two and one-half miles north of Lincoln Highway, in Franklin County.

Martin Hill Tower -- elevation 3,075 feet above sea level: located on Martin mountain, six miles south of Rainsburg, in Bedford County.

Blue Knob Tower -- elevation 3,165 feet above sea level; located three miles north of Pavia, in Bedford County.

Sideling Hill Tower -- elevation 2,360 feet above sea level; located three-fourths of a mile south of Lincoln Highway, in Fulton County.

An observer, or watchman, is on duty at each tower from March 15 to June 1, and October 1 to December 1, each year.

Towers are connected by telephones with District Forester's office, at McConnellsburg, with Inspectors, and with a large number of Forest Fire Wardens.

Nineteen miles of telephone line have been constructed to connect towers with commercial lines.

Forest Fire Wardens in the District	----	156
Inspectors	-----	3
Towermen	-----	4

BEDFORD DIVISION

Eleven thousand five hundred and seventy acres of this Division are in southern Bedford County. In the Division are 12 miles of roads and 39 miles of fire trails.

MARTIN HILL STATE FOREST MONUMENT

This tract in Sweet Root Gap, consists of about 15 acres of virgin hemlock trees, 100 feet high. The area was set aside by the State Forest Commission to serve as an object lesson showing what Pennsylvania forests were and will be again if properly protected and managed.

There are three permanent camp sites in this Division, as well as a State game refuge of 2,100 acres. From time to time game is released within this refuge for propagation. Hunting is prohibited on the refuge at all times. Elsewhere, hunting is permitted in the State Forest.

Forest Ranger E. H. Smith, of Rainsburg, is in charge of the Division.

LOUDON DIVISION

The Aughwick Valley Area comprises 7,500 acres, a short distance north of the Lincoln Highway, in Fulton and Franklin Counties.

In this tract are $13\frac{1}{2}$ miles of roads, and 29 miles of trails.

Aughwick creek flows through the area and offers good fishing. The stream will be stocked with fish by the Department of Forestry in cooperation with the Department of Fisheries.

There are two permanent camp sites in this region, and it is regarded as a good hunting country.

Forest Ranger J. V. Carlin, Cowans' Gap, Post Office address, Metal, Pa., is in charge of this tract.

The Bear Valley area comprises 4,500 acres in Bear Valley, three miles west of Upper Strasburg. In the tract are eleven miles of roads, and twenty-one miles of trails. Bear Valley stream flows through the valley and offers good fishing. Hunting is good in this territory. There is one permanent camp site lease in the tract.

Forest Ranger J. F. Smith, Chambersburg, R.D. #4, is in charge.

BUCHANAN MONUMENT

This Monument consists of sixteen acres of forest land surrounding the birth-place of James Buchanan, 15th President of the United States. It is situated in Peters township, Franklin County, near the town of Foltz, one-fourth of a mile from the Mercersburg Pike. A large pyramid of stones has been erected by Miss Harriet Johnson, niece of President Buchanan. The Department of Forestry manages and maintains the area. On the site of Buchanan's birth-place, Norway Spruce was planted in 1913.

DISTRICT FORESTER'S OFFICE, MCCONNELLSBURG, PA.

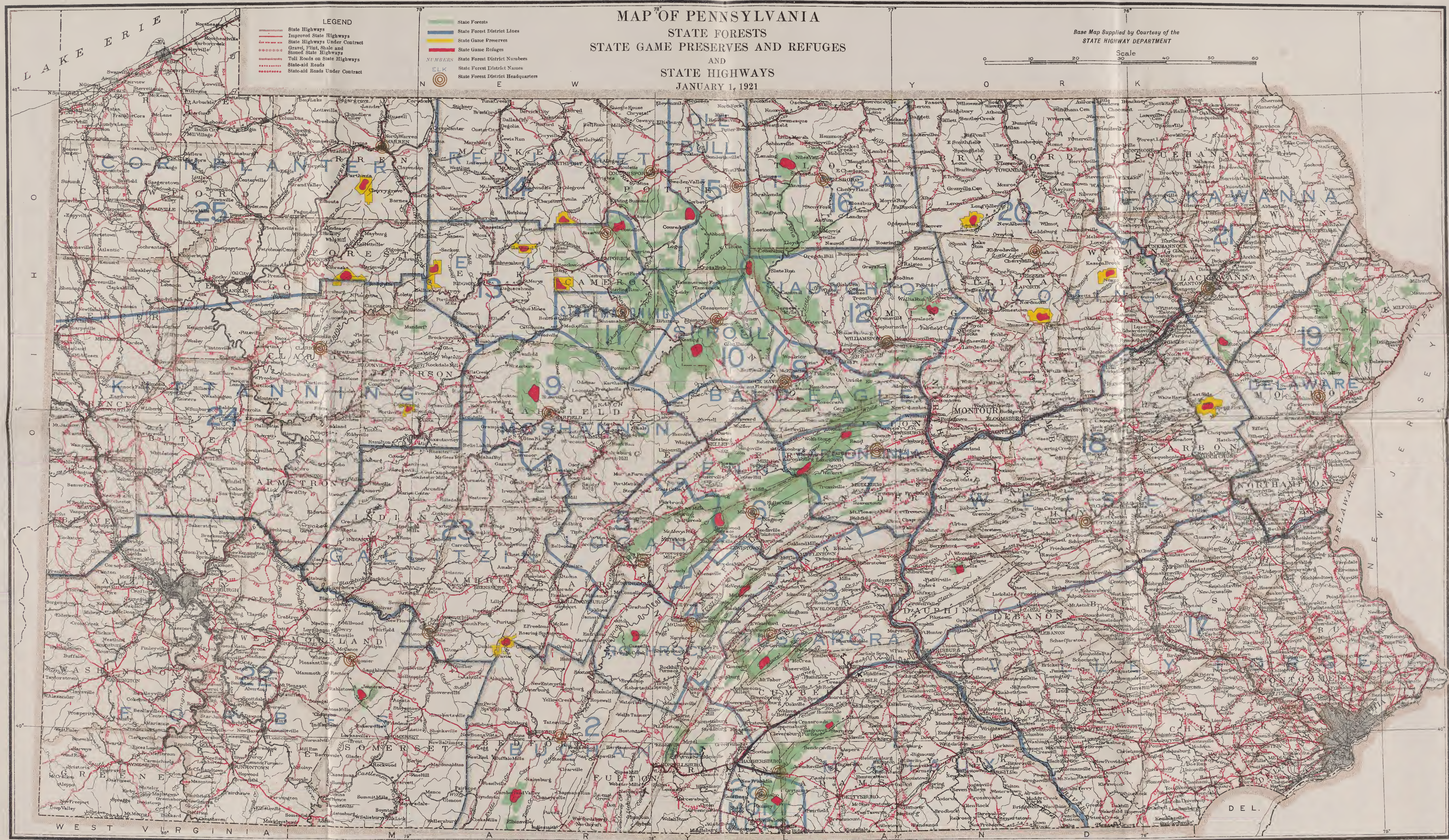
Permits to camp on State Forests for a period of three weeks, or less, may be procured from the District Forester or any other local Forest officer.

Camp sites, up to two acres in extent, can be leased for a period of ten years with privilege of renewal. Buildings may be erected on the site and they may be used at any time by leasee. Application should be made to the Department of Forestry, Harrisburg, Pa.

The District Forester's office is always willing to advise or give information concerning the forests and forest conditions in the District.

The Department of Forestry distributes forest tree seedlings for planting on vacant or idle lands. They may be procured in lots of 100 or more for the actual cost of packing and transportation. Application blanks may be obtained from the District Forester.

#####



AFFIDAVIT IN CLAIM FOR BOUNTY

State of Pennsylvania

SS:

County of _____

Before me, the undersigned, a _____
(Official title)

in and for said County, personally appeared _____
(Name of Claimant.)

whose postoffice address is _____
(Correct Post Office Address is important) (R. D. or Street No.)

who being duly sworn according to law doth depose and say that upon the _____
_____ day of _____, 19_____, he did kill _____
(Number) (Name of animal)

in the County of _____ Township of _____, Penna.;

also upon the _____ day of _____, 19_____, he did kill _____
(Number) (Name of animal)

in the County of _____ Township of _____, Penna.;

also upon the _____ day of _____, 19_____, he did kill _____
(Number) (Name of animal)

in the County of _____ Township of _____, Penna.;

also upon the _____ day of _____, 19_____, he did kill _____
(Number) (Name of animal)

in the County of _____ Township of _____, Penna.;

also upon the _____ day of _____, 19_____, he did kill _____
(Number) (Name of animal)

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(Number) (Name of animal)

in the County of _____ Township of _____, Penna.;

also upon the _____ day of _____, 19_____, he did kill _____
(Number) (Name of animal)

in the County of _____ Township of _____, Penna.;

also upon the _____ day of _____, 19_____, he did kill _____
(Number) (Name of animal)

in the County of _____ Township of _____, Penna.;

also upon the _____ day of _____, 19_____, he did kill _____
(Number) (Name of animal)

in the County of _____ Township of _____, Penna.,

and being desirous of securing the bounty for such killing as provided by the Act of May 23d,
1919, as amended by Act of April 1st, 1921, herewith presents the skin _____ of such animal _____

for examination. He further swears that the animal _____ for which the skin _____ as presented was
were

taken ^{was} were killed within the Commonwealth of Pennsylvania, and ^{is} are the skin _____ of the animal _____

as specifically named in this affidavit; that such animal _____ was were not raised in captivity and was were

not purchased or received from the party actually killing same, and was were not brought into this State

from another State or country, and that his claim as made is legitimate in all respects.

Sworn to and subscribed before me this _____

day of _____, 19_____



(Signature of official)

(Official title)

(Be sure that Claimant signs here)

READ AND OBSERVE

Always send the affidavit and skins together. Don't forward separately. Be sure and place your name and address on every package. This will avoid losses. Skin and dry all pelts same as when shipping to fur dealers.

We will forward valuable pelts direct to fur dealers if you enclose tag or legible shipping instructions.

GAME COMMISSION.

NOTE:—No skin sent to Harrisburg will be returned except by request. We therefore ask that you indicate your desire in this respect by the sentence below. If you want skin returned cross out the word "NOT" in the line below.

WE DO NOT WANT SKIN RETURNED.

NOTE TO OFFICIALS. Read other side carefully and save possible trouble. Officials will please complete records on the back of this affidavit as far as they are concerned.

ANNUAL REPORT

OF THE

BOARD OF

GAME COMMISSIONERS

OF THE

COMMONWEALTH *of* PENNSYLVANIA

INCLUDING THE

REPORT OF THE CHIEF GAME PROTECTOR

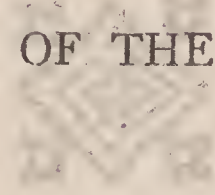
TO THE COMMISSION

FOR THE

YEAR 1921

HARRISBURG, PENNA.
J. L. L. KUHN, PRINTER TO THE COMMONWEALTH
1922.

ANNUAL REPORT
OF THE
BOARD OF
GAME COMMISSIONERS

OF THE

COMMONWEALTH OF PENNSYLVANIA

INCLUDING THE
REPORT OF THE CHIEF GAME PROTECTOR
TO THE COMMISSION
FOR THE
YEAR 1921

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ANNUAL REPORT
OF
BOARD OF GAME COMMISSIONERS

Harrisburg, Pa., January 5, 1922.

To His Excellency, William C. Sproul, Governor of Pennsylvania:

Sir: As directed by Act of Assembly, we the undersigned Members of the Board of Game Commissioners of the Commonwealth of Pennsylvania submit to you a report covering the work of our Board during the past year, and for your information we attach the report of our Secretary covering in detail various phases of the work.

From information gathered from many sources, as well as from personal observation, we are thoroughly convinced that the work of the Commission is in better condition today than at any time previously, and that the people of the Commonwealth in general are each year taking a more concerted interest in game and wild bird protection. The general movement throughout the Country to encourage outdoor recreation is partly responsible for this increased interest in our outdoors, with a corresponding increase in the number of persons in our State who enjoy hunting.

1921 LEGISLATIVE ENACTMENTS.

The nine (9) acts signed by your Excellency during the past session of the Legislature as summarized in our Secretary's report seem to meet with the approval of the sportsmen generally. We are especially pleased to note that practically all of the recommendations of our Board last year were so favorably acted upon by the Legislature, and that the same also met with your approval.

The most important of these changes is the uniform season for all small game, and it is hoped that the next Legislature, if any change is made in that part of the law, will see fit to include the few exceptions to a synchronous season for all small upland game.

While the new law protecting deer until they have antlers at least four inches from the top of the skull has secured better results than anticipated, largely because of the splendid degree of sportsmanship evidenced everywhere during the season just closed, it seems to be the consensus of opinion among sportsmen that all deer should be protected until they reach at least two and one-half years of age, or until they have two or more prongs to one side of their antlers. If this feature of our law again comes up for consideration it is hoped the change suggested will be made, thereby securing better breeding animals and more desirable trophies.

The authority vested in our Board by the last Legislature to revoke hunting licenses is securing good results, and, by judicious administration of this feature of the law, it is hoped to bring about materially improved conditions in sections of the State where heretofore proper respect for our laws was almost impossible to obtain.

The new laws controlling shooting, although quite drastic, are undoubtedly well worth while, and conservative sportsmen everywhere are commending your action in approving these two bills. Through these two acts the lives of our people are safeguarded while hunting to an extent not heretofore obtainable.

There seems to be strong sentiment among the sportsmen of the State for codification of our present laws protecting game and wild birds in order to reduce materially the bulk, as well as to clarify the application of the various acts on the subject, and we have directed our Secretary to have prepared by the Legislative Reference Bureau a complete draft of a code which will embrace all the present laws with practically no alterations whatever, so that if the next Legislature desires to give consideration to such codification the same will be ready to submit to that body.

Our people generally are of the opinion that the present laws, with the few exceptions above named, should be left undisturbed for a sufficient length of time to ascertain definitely their value or undesirability.

GAME CONDITIONS.

From reports reaching us from many directions, as well as from personal observation while inspecting various sections of the State, we are satisfied game conditions show continued improvement. Weather conditions during the season for small game were unfavorable, and the kill of game was not so large as would have been possible with better weather conditions. Due to such unfavorable

weather conditions we have a larger supply of game of all sorts left over for breeding stock than we have had for some time past. However, to insure a future supply, we urge that sportsmen continue killing ruffed grouse sparingly. Generally speaking, the sportsmen over the state seem to be of one accord that the season of 1921 was a successful one, and while they were not successful in killing large quantities of game, it is encouraging to note that the great majority of our people are becoming more and more interested in maintaining a sufficient game supply to serve as an incentive to take them into the open for a few days of recreation rather than to secure a food supply through large kills. By reference to the addendum of the Secretary's report you will find a tabulated statement giving fairly accurate figures on the game of various kinds killed during the past season.

The large game season was the most successful Pennsylvania has ever experienced, and for your information we give below comparative data on the kill of bears and deer that proves conclusively the above assertion:

	1907	1915	1918	1919	1920	1921
Bear,	200	188**	387	472	420	510
Deer,	200*	1287	1754	2939	3300	4840

During all of the above period the laws protecting large game were constantly being improved and made more restrictive. By reference to the addendum above mentioned, you will note that the kill of "spike" bucks (only one and one-half years old—antlers without prongs) was comparatively limited. This is the first season we have gathered data to show the antler growth on the deer killed in Pennsylvania, and we are pleased to observe that the sportsmen themselves are rapidly reaching the point where they will not permit the killing of immature deer even though the law does not prohibit the killing of small bucks. According to data collected, the "spike" bucks killed this past season numbered 639; bucks with two points to one antler, 796; bucks with three points to one antler, 1248; and bucks with four points to one antler and larger, 2157; with an average weight of about 130 pounds, hog dressed.

During the 1920 season we had reports of 198 does and 66 baby bucks with antlers less than two inches long being killed. During the season just closed, with approximately 100,000 men (20,000 more than last year) hunting large game, and an increase of about 45 per cent. in the kill of legal bucks, the reports indicate that 213 does and 68 bucks with horns less than four inches long were killed this

*Male deer of all ages—the first year for the killing of bucks only in Pennsylvania.
**First season trapping was prohibited and number limited to one to each person.

season. In most sections of the State the killing of illegal deer was reduced by more than 50 per cent., but with the opening of new deer territory, a larger number of hunters, etc., the number of illegally killed deer totals approximately the same as during the season of 1920, although we are reasonably confident that the records on illegally killed deer for the 1921 season cover more nearly the actual number so killed than ever before. This in our opinion speaks well for the sportsmen of Pennsylvania, and we anticipate that next season the kill of illegal deer will be materially reduced in number, as well as the ratio to the legal kill, in all sections of the State. While new laws increasing the length of the antlers, revoking licenses of persons violating the law, and the greater interest taken by our people, have undoubtedly been responsible to a large degree for the improvement noted, yet the work of the field force has also been of very decided assistance to this end.

HUNTING LICENSES.

Latest available figures indicate that 462,371 resident hunters' licenses and 1,761 non-resident hunters' licenses were issued during the season just closed, or more than one out of every twenty of our residents secured licenses to hunt. This is an increase of 30,000 over last season, and an increase of slightly more than 60,000 over the 1919 season. Industrial conditions apparently are partly responsible, as a large number of persons spent otherwise idle time hunting for game of various kinds this season. Indications are that with normal conditions next season the number of licenses issued will again show quite an increase.

HUNTING ACCIDENTS.

During the season just closed 29 men were killed and 130 were wounded while hunting, in comparison with 43 killed and 85 wounded in 1920, and 35 killed and 120 wounded in 1919. Almost two-thirds of these fatalities were the result of carelessness with firearms on the part of those killed, and unfortunately it seems to be almost impossible to reduce materially fatalities from this cause. In a limited number of instances fatalities occurred through carelessness on the part of fellow-hunters. The new law imposing heavy penalties upon persons shooting others in mistake for wild creatures has no doubt helped decidedly to reduce the number of fatalities, and, according to the best information we have been able to gather, no one was killed in Pennsylvania in mistake for a deer this year, while during 1919 and 1920 one person was killed each season in mistake for deer. One man, Mr. John Ditzler, of Lycoming County, was shot in mistake for a bear by Mr. J. E. Arnold, the shooting proving fatal within a short time. This case is now being

prosecuted by the County authorities. We have record of a few cases in which persons were shot in mistake for wild creatures of various sorts. In every instance where sportsmen were shot in mistake for wild creatures, prosecutions have been brought by county authorities. It is evident, therefore, that the buck law of Pennsylvania has had two-fold effect; first, a rapid increase in the deer; second, a saving of human life. In other States, without laws protecting does and baby bucks, and drastic laws applying to persons shooting others in mistake for wild creatures, a number of sportsmen are each year killed in mistake for deer.

It has been suggested, and we believe it would prove beneficial, that boys under 17 years of age should be prohibited from using firearms to hunt for wild creatures of any sort unless accompanied by a responsible adult. A number of the accidents during the past season occurred through groups of boys using firearms without the supervision of responsible adults.

GAME REFUGES.

At this time we have thirty game refuges established, and two additional tracts on which purchase is about completed for establishing refuges. Of these thirty-two tracts, twenty are located on State Forest lands, five on leased lands, and the balance on lands purchased by the Board for this purpose. For detailed information relative to the status of lands purchased, we respectfully refer you to our Secretary's report on that subject.

We now have eight auxiliary game refuges which are meeting with the approval of the sportsmen, and which are being operated with a limited expenditure from our funds.

GAME FOR STOCKING PURPOSES.

During the past year we secured for stocking purposes quite a large number of desirable birds and animals, and expended for this purpose during the 1921 fiscal year \$62,347.27, exclusive of expressage, feeding till liberation, etc., in comparison with \$56,259.91 during 1920, and \$28,115.60 during 1919 for this purpose. During the 1922 fiscal year we hope again to secure a large number of cotton-tailed rabbits and Mexican bob-white quail, with such number of deer, ring-neck pheasants, etc., as may be available.

BOUNTIES.

The growing popularity of the bounty system of Pennsylvania, especially when passing through serious industrial depressions, has resulted in an increase in the number of animals presented for bounties during the past year, requiring a total of \$128,269.50 of

the hunters' license revenue for this phase of our work alone. By reference to the Secretary's report you will note that since the operation of the present bounty system, beginning with April 15, 1915, we have paid bounties on more than 2,600 wild cats, almost 45,000 foxes and more than 260,000 weasels, requiring a total of more than \$500,000 to pay the bounties, not including the cost of administration. In addition, our field officers during the year destroyed a large number of predatory birds and animals of various kinds, including 50 wild cats, 143 foxes, 63 minks, 259 weasels, more than 3,500 crows, almost 1,500 stray domestic cats, and a large number of stray, homeless dogs. We believe the sportsmen in addition killed large numbers of destructive birds and animals of various kinds during the year, total figures for which, however, are not yet available. Sportsmen who reported on the game killed during the 1920 season (reports were received from only eight per cent. of the number of licensees) reported killing a surprisingly large number of predatory birds and animals, the most notable of which is more than 6,500 weasels, more than 5,000 stray homeless cats, and other species in proportion. A complete tabulated statement of the birds and animals reported killed by the sportsmen who made reports for 1920 will be found in our Secretary's report.

STATUS OF FUNDS.

By reference to our Secretary's financial statement in the latter part of his report, you will note that during the year the total deposits from penalties, propagating licenses, etc., exclusive of hunter's license fees in both funds, amounted to \$69,963.25 as compared with \$55,278.62 during 1920, and \$29,014.06 deposited during 1919. In view of the fact that fully 75 per cent. of the time of our field force is spent in educational and preventative work, the amount so collected is surprising, especially since in the great majority of prosecutions the maximum penalty that might be imposed is not collected. Instead, it has been our policy from the beginning to impose only a sufficient amount of penalty to have the defendant understand that the law means what it says.

The deposits during the year from hunters' license fees totals \$438,591.50. This amount, together with the amount collected in penalties and other fees as above stated, aggregates a total of \$508,554.75 deposited to our credit in the State Treasury during the year. The disbursements for the general activities of the Department (including the purchase of lands, surveys, titles, etc., from funds previously accumulated approximating a cost of almost \$110,000.00) aggregates \$527,588.40, and for the payment of bounties and administration in connection therewith \$137,763.51, or total disbursements during the year of \$665,351.91.

During the 1922 fiscal year the purchase of lands previously contracted for will require in the neighborhood of \$19,000.00, and while the past year was an unusual one on account of the industrial depression necessitating greater vigilance and larger expenditures for field work, our activities during the coming year will be so restricted as to keep within the funds available. While the balance in the Treasury on November 30th in the two funds to our credit was \$362,434.68, because of the later open season revenue deposited during December and January from hunters' licenses issued during the season, and deposits from penalties and fees collected during the year, will make available to our use a sum in excess of \$500,000. without using any revenue derived from 1922 licenses.

FIELD FORCES

The field force of this Department has during the past year co-operated with field forces of various other Departments in every way possible, and in return we have received more earnest co-operation from other Departments, such as the Department of Forestry, Department of Fisheries, State Police and the Department of Agriculture, that has been proven mutually advantageous.

The personnel of our field organization is in better condition today than at any time in the past. The work is so co-ordinated that results as nearly uniform as possible are being obtained in all sections, and the co operation received from all directions is indeed gratifying.

Respectfully submitted,

CHARLES B. PENROSE, President.

JNO. M. PHILLIPS, Vice President.

W. B. McCALEB.

H. J. DONALDSON.

J. S. SPEER.

WILLIAM S. ELLIS.

ATTEST:

SETH E. GORDON,

Secretary.

Harrisburg, Pa., December 1, 1921.

To The Members of the Board of Game Commissioners,
Commonwealth of Pennsylvania.

Gentlemen:—I beg to submit the following Annual Report covering the work of the Department during the past fiscal year, and in order that important material may be made available for the use of the sportsmen of the Commonwealth, some of the data given to you in the mid-summer report is herein incorporated.

I am very much pleased to report that the sportsmen of the Commonwealth, and in fact thousands of our citizens who are not at all interested in hunting, have taken a far greater interest in the work of the Commission during the past year than ever before. Through the splendid co-operation of the public press we have been able to disseminate a vast amount of useful information on changes in the game laws, the necessity for prompt action on the part of our people in various matters, such as feeding game, destroying vermin, protecting song and insectivorous birds, etc., and this educational propaganda supplementing the work of our field force is largely responsible for the greatly improved conditions and additional interest taken by our people. While we were seriously handicapped in the dissemination of information on game law changes because of the printers' strike, the public press came to our rescue and devoted more space to our work than any time previously, with the result that Pennsylvanians were generally well informed and governed themselves accordingly.

Through the co-ordination of our field force, the co-operation of police officers of other Departments, and above all the increased interest taken by the sportsmen themselves, the laws protecting game and wild birds were better observed in Pennsylvania this year than ever before. In meeting with sportsmen from all parts of the State one of the comments universally heard is that our laws have never been so well obeyed as this season.

NEW LEGISLATION

As usual, the number of bills introduced in the last Legislature affecting sportsmen was quite large. A total of twenty-four (24) bills applying to some phase of hunting were introduced in the House and three (3) in the Senate. Had it not been for the recommendations sent to the Members of the Legislature and Sportsmen's Organizations by the Game Commission early in January, the number of bills introduced would have been very much larger. Only nine (9) of the House Bills passed finally and were approved by the Governor.

As a matter of record and information to those who have not previously received same, below is given a resume of the laws affecting sportsmen passed by the 1921 Legislature. By comparing the list of new laws with the recommendations of the sportsmen endorsed by the Game Commission in the last annual report, it is gratifying to note that these recommendations were enacted almost verbatim as approved in a compilation sent to the sportsmen of the State under date of January 19th, 1921. The changes made by the 1921 Legislature are:

1. A uniform season for all small game during the month of November only, except woodcock and rabbits. While the great majority of sportsmen desired the season for woodcock and rabbits included with other small game for the month of November only, the Legislature, as a compromise, refrained from changing the season as it previously applied to woodcock and rabbits. The season on raccoons was changed to open October 1st instead of September 1st, and close January 31st instead of December 31st.

2. Reduced the bag limit on rabbits from ten to five per day, and left the season limit at forty; reduced the bag limit on ruffed grouse to three per day and fifteen for the season, instead of four per day and twenty-four for the season as heretofore; and reduced the bag limit on ring-neck pheasants to three per day and six for the season, instead of four per day and ten for the season as previously.

3. Changed the law on deer to protect all male deer until they have antlers at least four inches long from the top of the skull instead of "two inches above the hair" as previously.

4. Clarified the provisions of Section 21 of the general game law fixing the number of large game animals for camps and hunting parties, made proper disposition of animals killed unintentionally in excess of the legal limit stipulated, provided for the tagging of large game within six hours after killing, and provided that each hunting party or camp must keep a roster to show the name, address and license numbers of all persons hunting with that party.

5. Section 22 of the general game law relative to the killing of game when destroying crops was re-written to include all provisions of the old law relative to killing game when destroying crops and clarified same to avoid misunderstanding.

6. Other changes in the general game law include some stringent regulations on the possession of ferrets and their delivery by common carriers; changing the propagating license law to permit shipping game propagated under license to other States under certain conditions; extending the protection on elk until 1923; requiring the use of single bullets only in killing bears as game the same as previously applied to deer; and changing the law on dogs chasing game during the close season so that the owners may be prosecuted without first giving a written notice, also prohibiting the carrying of certain firearms while training dogs during the close season.

7. The Resident Hunter's License Law was amended to provide for the wearing of the tag on the middle of the back instead of on the arm as previously, also to clarify various provisions concerning the carrying of the license and displaying the tag while hunting, and to give the Game Commission the power to revoke licenses for periods of one to five years.

8. A new law protecting the mink, muskrat, opossum, otter, raccoon and skunk as fur-bearing animals, with an open season for all except the raccoon from November 1st to the end of February, and placing the enforcement of same under the jurisdiction of the Game Commission, also removing the mink from the list of animals on which bounty is paid.

9. Reducing the bounty on weasels from \$2.00 to \$1.50.

10. Two acts for the protection of human life, one controlling the shooting of bullets in game territory by prohibiting shooting at unprotected targets and live trees, the other imposing heavy penalties upon persons shooting others in mistake for wild creatures.

With a few exceptions, the people of the State in general are very well pleased with the changes in the laws made by the 1921 Legislature. While this report is being written renewed complaints are being received against extending the open season for rabbits into the large game season, and a number of complaints were received on the opening of the woodcock season prior to the open season for ruffed grouse, although such latter complaints were not so bitter as those relative to the rabbit season extending into the large game season. These are questions on which we may never be able to get all classes of sportsmen to agree, largely because of our varied climatic conditions. The new bag limits seem to meet with the approval of everybody, and but few objections to the new requirements for camps while hunting big game have been received.

Contrary to exceptions, many prominent sportsmen are already favorably commenting upon the change in the law on deer, and indications are that if the suggestion of the Game Commission to restrict the killing of deer to animals of two or more points to one antler, with a proviso that a deer with horns eight or more inches long without points should be considered legal, should again come up before the Legislature there will be no doubt about the large majority of sportsmen giving their hearty approval to such a provision. Indications are that even under the present law but few "spike" bucks will be killed during the present season, and that the number of does and baby bucks killed will be materially reduced in many sections. Letters have lately been received from prominent sportsmen who bitterly opposed the change recommended by the Game Commission now giving their hearty approval to a change of this sort, because after the first few days of the season they can readily see the value of such legislation. While a few camps during the 1920 season passed resolutions agreeing among themselves to

refrain from killing "spike" bucks, from information received a large majority of the camps in our deer territory will refrain from killing "spike" bucks this year, because they realize that these animals are needed for future breeding purposes, also that if left go until next year much better trophies will be the result.

The changes made in the Resident Hunter's License Law are meeting with general approbation among the sportsmen. Through slight changes in the arrangement of the license, as well as the tag, and the co-operation of the sportsmen in general, indications are that but comparatively few violations of this law occurred this year. The officers report that never before have they seen this law so universally obeyed. *The most important change, however, in the hunter's license law is that provision giving the Game Commission the power to revoke licenses*, and from all directions comes the information that men who heretofore were disposed to disregard the game laws were particularly solicitous to obey strictly the present law for fear that any infractions might mean the revocation of their hunting license for periods of one to five years. In a number of cases license have already been taken away from persons who insisted on violating the law, and the publicity given in these instances has had a very wide-spread moral effect. This feature of the license law places our sportsmen of all classes on an equal basis, and even better results may be expected in the future because of this provision.

The two acts controlling and regulating shooting, and especially the act imposing penalties upon persons shooting others in mistake for game, have so far proven far more valuable than the sponsors had hoped for. While the Representative from Huntingdon County had introduced a bill in the 1915 Session attempting to impose penalties upon persons shooting others in mistake for wild creatures, there seemed to be but little sentiment at that time for such legislation, with the result that the bill did not even get out of the Committee. From reports received up to this time, the sportsmen of the State would now protest most bitterly against the repeal of these two laws. Early reports indicate that shooting in large game territory will be reduced by at least seventy-five per cent., some claiming ninety per cent. over previous years, and that sportsmen who heretofore hesitated to participate in large game hunting will again feel free to enjoy their favorite sport. The first case under the new law imposing penalties upon persons shooting others in mistake for wild creatures occurred in Lycoming County when Mr. George W. Sweeley of that county shot and killed Charles W. Carrol in mistake for a woodchuck. Mr. Sweeley was prosecuted by the County authorities, convicted and a heavy sentence imposed. A limited number of additional cases of this sort may develop before the close of the hunting season, but the benefit of this act will become wide-spread as the result of such prosecutions becomes more generally known.

The consensus of opinion among the sportsmen seems to be that the present laws, with the few exceptions above mentioned, should be left undisturbed for several years so as to give plenty of time to try out their value or undesirability.

CODIFICATION OF GAME LAWS

In view of the general trend in legislation to codify laws of all sorts, there was a very decided sentiment in the Game Committees of the House and Senate of the last Legislature in favor of codifying all the laws on our books relative to the taking of game in order that the bulk might be materially reduced and the laws in general simplified thereby. While I dislike to even attempt such codification as it will mean a great deal of difficult, painstaking work on the part of this office and the Legislative Reference Bureau, after a careful survey of the present laws it is evident that by codifying we can reduce the bulk of the present laws by at least thirty-five (35) pages of the 1921 game law pamphlet. For example, each act now has a separate title, usually a separate clause defining various terms, each section a separate recital of penalties, a separate clause making disposition of seized property, a separate clause giving the power of summary conviction and such other matters as may be necessary to provide for proper enforcement, and a separate clause covering the disposition of penalties. If a code should be prepared, one title would suffice for all acts included in such code, and the disposition of property, enforcement, and penalties would each take just one clause instead of appearing in each act separately as at this time. I would recommend against any material changes in the application of the present laws at this time. In addition to the above, there are several acts that are practically duplicates of each other, such as the alien gun and alien dog law, and the non-resident hunter's license law and the resident hunter's license law. In other instances our law is obsolete, such as the provision permitting the sale of wild water fowl, which is prohibited by the Federal law and will undoubtedly never again be legalized.

FIELD FORCE

The present system of handling our field force, the cooperation we are giving other Departments and the assistance we are in turn receiving from them, continues to meet with the hearty approval and support of the sportsmen of the Commonwealth. Our field organization, which was never in better shape than today, is so co-ordinated that uniform results are being obtained throughout the State and the sportsmen are assisting our officers as never before. At least seventy-five per cent. of the time and effort of our field officers is being devoted to educational work among the sportsmen, and the results obtained more than justify our effort in that direction,

as we are securing such universal co-operation and support from the sportsmen that it augurs well for the future sportsmen of the Keystone State.

While the field officers have displayed a far greater interest and energetic activity in their work than ever before, because of the unusual industrial depression through which we have been passing during the past year the demands made on our field organization were greater than previously. While many of the complaints relative to violations of the law upon investigation developed that some unemployed citizen was merely trying to devote some idle time to destroying vermin, hunting for woodchucks, etc., and that the game laws were not being violated as had been reported, nevertheless these additional complaints required the expenditure of larger amounts for traveling expenses than anticipated.

Because of the foregoing complaints, as well as the very decided increase in the number of hunters, the demands for the employment of Special Deputy Game Protectors to assist in controlling conditions were unusually heavy. Even though the Deputy Protectors in general have assisted in a very material way without being employed under pay, still there were many urgent requests from all sections of the State for the employment of Special Deputy Game Protectors who had proven trustworthy and reliable to assist the regular officers. The result is that a considerably larger expenditure of funds was necessary for this purpose than anticipated. From reports received to date, the employment of such special help was entirely justified in the great majority of instances, and in many cases through such employment conditions were corrected and penalties were collected in excess of the amount necessary to expend for such employment.

One case has been reported during the year in which it was necessary for one of our officers to defend himself by actually shooting a violator of the law after placing him under arrest. In this instance Special Deputy John O. Powell, of Ringtown, Schuylkill County, was compelled to shoot and kill one Frank Wilson, of Jersey Shore. After placing Wilson and his companion under arrest they went along without protest but suddenly jumped behind a water tank and opened fire on the officer. After Wilson was killed his accomplice suddenly departed for parts unknown. Both were apparently fugitives from justice. This is the first case of this sort during the last ten years.

GAME CONDITIONS

Game conditions throughout the State prior to the open season were reported to be considerably better than any time during the past fifteen years. I visited nineteen (19) of our thirty-two (32) game refuges during the past year, and in the majority of instances traversed the entire refuge line with the officer in charge, as well as nearby territory. I also covered a majority of the sixty-seven (67) counties and conferred with interested sportsmen, and am satisfied

that the reports coming to us relative to game conditions are not exaggerated. Last spring we had an exceptionally favorable hatching and rearing season for our game birds in practically all parts of the State, and conditions were also quite favorable for a marked increase in our rabbits. In addition to favorable weather conditions, the sportsmen have taken an interest in destroying vermin, killing stray house cats, and assisting in securing a proper observance of the law relative to dogs running at large chasing and destroying game during the breeding season. The Department of Agriculture has also made a special effort to enforce the dog license law, which among other things means keeping even licensed dogs from running at large, in many cases destroying game and wild birds.

While figures are not yet available on the results of the open season, I am afraid that weather conditions have been against the sportsmen so far, this being true especially for the grouse and rabbit hunters, although such unfavorable weather conditions will undoubtedly save a great deal of breeding stock that would otherwise be killed. In order that you may more fully understand conditions as they apply to game of various species, I beg to report as follows:

DEER: Reports from all sections of the State indicate that deer have increased very rapidly. Sections of the State, not looked upon as deer territory for a number of years, are again furnishing good deer hunting. In most instances such sections have been protected by refuges or stocked by the Game Commission. A limited number of complaints have been received during the year from land owners who felt that deer had unnecessarily destroyed property for them. Under the new law relative to the killing of game when destroying property, land owners know definitely their rights when deer are materially injuring their property, and less complaints are anticipated in the future. I regret to say that we know of three different instances where deer were killed by property owners because material damage was being done, and upon investigation it was found that such action was justifiable. I am reasonably sure that the kill of legal deer during the 1921 season will be twenty-five to thirty per cent. higher than last year, even though, from present indications, a great majority of the sportsmen will refrain from killing "spike" bucks. Last year the kill of illegal deer was materially reduced and during the present open season the kill of illegal deer in many sections will again be reduced by approximately fifty per cent., this being made possible through better co-operation on the part of the sportsmen brought about by the unusually large amount of newspaper publicity, educational work among sportsmen's organizations and individuals, and a rather strict enforcement of the law, including the resident hunter's license law. A large supply of new posters warning deer hunters has been printed and distributed throughout the State which will also help materially in correcting conditions.

A record deer for the 1920 season, probably for the State, weighing 267 pounds actual weight, hog dressed, was killed on Ross Run, Forest County. This was evidently one of the large Michigan deer stocked in that section a few years ago.

ELK: While these animals seem to be increasing nicely in several sections of the State, we are still receiving complaints from various directions about their depredations, and it may be necessary to remove some of these animals in order to relieve the situation. Several elk have been killed during the past year by property owners under the provisions of law, and upon investigation it develops that such action was justified.

BEAR: Bears have apparently increased quite rapidly in many sections of the State, and in some instances outlaw bears have committed depredations, resulting in some sentiment in the last session of the Legislature to take all protection from bears in counties in which they become objectionable upon petition of 200 residents. While your action in 1919 increasing the bag limit of bears in Potter county to two per man caused an influx of bear hunters to that section, your action this year in taking the limit off bears entirely in that county and again permitting the use of bear pens, offering \$25.00 for each live bear trapped and turned over to the Game Commission between July 1st and January 1st, also making arrangements to trap bears through our own organization for stocking purposes in sections where these animals were formerly found, will undoubtedly help in a very material way to reduce the number and relieve conditions in that county.

Early reports reaching the Department are that thousands of sportsmen swarmed to Potter County to hunt bears, taxing boarding, camping, railroad and all other facilities to the limit, and that most of the bears remaining in that county on November 1st were literally driven to surrounding territory. Food conditions were reported unfavorable during September and October in Potter County, causing some bears to drift out of that section in search of food. Early reports indicate that notwithstanding the large army of sportsmen hunting bears in Potter County, more bears are being killed in surrounding territory.

Regardless of the fact that during the late summer months there was an unusually bountiful supply of berries of all sorts and trapping was difficult, nine (9) of these animals were trapped by our representatives and removed to the southwestern part of the State for stocking purposes. The residents of that county, however, seemed to take but little interest in building pens in order to catch bears for the Game Commission unless our representatives assisted in building the pens. With such assistance a few pens were built and operated by residents of the county.

Indications are that the kill of bears in Pennsylvania will be considerably higher than last year because some early tracking snows made it possible to locate and pursue these animals more easily than during the 1920 season. Bears weighing 300 to 400 pounds hog dressed are not infrequent, but rarely are authentic reports received covering the killing of such extraordinary specimens as one recently killed in the southeastern part of Potter County, the carcass of which could not be dragged out of the forest with a mule. Experienced bear hunters composing the party estimated the weight at 550 pounds. The skin measured 8 feet 4 inches, and the sole of the hind foot measured 8½ inches, so that this animal was evidently a rare specimen.

I have been requested to prepare a paper on "The Black Bear as a Game Animal in Pennsylvania" to be read at the Eighth National Game Conference held in New York City December 12th and 13th under the auspices of the American Game Protective Association.

In this paper I have given a complete history of legislation on bears in Pennsylvania, and hope same will prove of interest to representatives from most of the States and a number of Provinces of Canada there assembled.

RABBITS: Because of the favorable breeding season last spring, as well as the restocking work done by the Department during the past winter, more rabbits were seen all over the State during the summer and early fall months than for four or more years past. In a few sections where vermin conditions are reported unfavorable, rabbits have apparently not materially increased. But of unfavorable weather conditions during the first month of the open season, the kill of rabbits may not equal that of 1920, although accurate estimates cannot be made until after reports are received from various parts of the State after the close of the season on December 15th. There is a great deal of sentiment among the sportsmen, especially in sections where deer are hunted, against permitting the hunting of rabbits in December, also because in December we usually have tracking snow which permits hunters to almost exterminate the stock remaining over after November.

SQUIRRELS: Early reports on squirrel conditions indicate that these animals have increased nicely during the past year, and in a number of sections sportsmen report better squirrel shooting than for some time past. Our unusually plentiful nut supply during the fall of 1920 with a mild winter was very favorable to squirrels. Many portions of the State are not adapted to squirrels at this time due to the cutting of our hardwood forests, and nut-bearing trees to supply food are now found in limited territories only. Young nut-bearing trees are plentiful in most sections of the State but not yet large enough to produce feed or suitable shelter.

WILD TURKEYS: Reports received from practically all sections where turkeys are found indicate that the birds remaining

over after the close of the 1920 hunting season wintered unusually well because of the mild weather prevailing, and that they hatched and raised good broods under favorable conditions last spring and summer. Early reports indicate that the kill of turkeys was probably larger than usual because the season opened at the same time as the squirrel season, and the turkeys did not have the former two or three weeks in which to become wary when hunters approached. Regardless of this condition, it is the consensus of opinion among residents in turkey territory that the actual kill of turkeys will be no larger than heretofore when poaching frequently reduced large flocks during the squirrel and grouse season.

RUFFED GROUSE: Ruffed grouse have apparently increased in most sections of the State, and with a favorable hatching and rearing season have again reached the point where, *with careful protection and continued conservative killing*, these birds will furnish a fair amount of sport in many sections. Indications are that the weather conditions during the season just closed were not favorable to grouse shooting, and that we will have a fairly good supply of seed stock left over. While the bag limit was reduced by the last Legislature to three per day and fifteen for the season, but few protests from sportsmen have been received concerning this reduced bag limit, and it is believed the great majority of hunters adhered strictly to this bag limit regardless of good shooting days following spells of unfavorable weather conditions that prevailed during the season. If our hunters will only continue conserving the grouse as they have during the past four seasons, there is no reason why we should not have a sufficient number of these gamest of all game birds to supply reasonable shooting for many years.

RING-NECK PHEASANTS: Ring-necks are apparently increasing in most sections, and while twenty counties were closed this year to the shooting of these birds, indications are the reports will show that the number killed will be almost as large as last season. There seems to be a growing sentiment among our sportsmen to prohibit the shooting of female ring-neck pheasants, and by the time the next Legislature meets there will doubtless be a crystallization of sentiment in favor of restricting the killing of ring-necks to cocks only. The only objection to doing this is that some hunters may unintentionally kill female pheasants because they are not acquainted with the birds and therefore unable to distinguish the sexes in flight, while others may occasionally kill female ring-neck pheasants in mistake for ruffed grouse. If the killing of ring-necks should be restricted to males only, the provision of our law providing for the abatement of penalties where a mistake is made should be extended to apply to cases of this sort so that there might be an incentive, in addition to good sportsmanship, for hunters to report immediately errors of this kind and pay their penalty, and receive a return of a portion of same later on.

A bill in the last Legislature purporting to close the entire State to ring-neck pheasants for two years met with hearty approval from sportsmen generally, but this bill was caught and lost in the final rush of the session. It is regrettable that closing counties here and there to these birds has caused some hardships in instances where sportsmen innocently killed such birds in closed counties, although such ignorance is inexcusable, as same received very liberal publicity.

QUAIL: Indications are that we have more quail in Pennsylvania today than for many years past. The native birds seem to have increased in sections where they are still found, while the Mexican bob-whites received and stocked in the springtime have thrived in almost every section where released. Unfortunately, so many land owners refuse to permit even good law-abiding sportsmen to kill any quail on their premises, with the result that sportsmen cannot continue protecting and restocking quail, and in years to come the quail will again be back to the point where they were five or ten years ago unless this condition can be remedied. Through the sportsmen's organizations it is hoped that these questions may be worked out with the land owners so that sportsmen will be permitted to hunt quail within reason in order that the birds may furnish sport; that the coveys may be scattered and inter-mixed; and that the sportsmen will feel free to continue restocking and feeding during the wintertime as has been done in the last six or more years. The true sportsmen of Pennsylvania are killing comparatively few quail, because they are just as much interested in protecting and increasing these birds as the land owners. Last winter quail were not compelled to face the rigors of severe winter weather, and with favorable weather conditions this past season, several broods were reared. We have an authentic report of a Mexican bob-white quail that hatched a brood of fourteen (14) young birds on the 10th day of September last near Indiana. If weather conditions should become severe this winter a special effort will be made to have as many birds fed in their native habitat as possible, as well as trapped and cared for during the winter months. Birds fed without reducing to captivity should be trapped and coveys inter-mixed prior to the breeding season to secure the best results.

HUNGARIAN PARTRIDGES: These birds when first stocked apparently disappeared and were thought to be an entire failure. In some sections, however, we have recently received reports that these birds are appearing, from where no one knows, and are increasing nicely. It is my opinion that when the birds were first stocked they were released in too limited numbers in each locality, and that in stocking a new species not less than from three to eight pairs should be released in close proximity to each other so that even though losses do occur there will be mates for breeding purposes. Sportsmen who have hunted these birds report that they

are a splendid game bird, are more difficult to kill than bob-white, and seem to be able to care for themselves under more severe weather conditions than the bob-white.

better woodcock shooting than for sometime past. This apparently

WOODCOCK: Reports indicate that these migratory game birds are increasing. Sportsmen in many sections of the State report agrees with the information received by the Federal authorities from other sections of the country. It is apparent, however, that most of the woodcock killed in Pennsylvania were killed during the month of November, while hunting for other game.

WILD WATERFOWL: Last spring more wild waterfowl were reported than for a number of years past, and this fall the sportsmen of Pennsylvania enjoyed better shooting than for fifteen or twenty years past. Fortunately, our stream conditions were favorable to good shooting in the Susquehanna Valley and other sections of the State, and the sportsmen who were at first disposed to protest bitterly against the inhibition against spring shooting are now in hearty accord with our law and the Federal law prohibiting spring shooting.

In connection with the law prohibiting spring shooting it is gratifying to note that the Game Commission of Pennsylvania under date of May 24, 1899 passed a resolution condemning spring shooting of aquatic fowl within the United States and Canada, and asked the concerted support of Game Commissions, Associations and individuals in the United States and Canada to assist in securing National and Dominion laws that would totally abolish what was termed a nefarious and inhuman practice. I believe in the above resolution the Game Commission of Pennsylvania was the first organized body of this sort to take action on prohibiting spring shooting.

TABULATION OF REPORTS FROM HUNTERS FOR 1920 SEASON.

As previously reported to you, about eight per cent. of the licensees for the 1920 season reported the quantity of game killed as requested on the stub attached to their licenses. While this was the first attempt to obtain such data in this manner, and the actual number of reports was far below expectations, the data collected was invaluable, and this initial effort demonstrates that in Pennsylvania the sportsmen are sufficiently wide awake to the benefit of data of this sort that it will probably be unnecessary to pass drastic laws imposing heavy penalties upon licensees who may overlook the request to file this report, as is the case in a number of other States. The highest percentage of licensees reporting in any county was thirty-six per cent. in the case of Fulton County. This little county demonstrated that her sportsmen are wide awake. The next highest percentage of reports came from Bradford County, from which slightly over 28 per cent. of the sportsmen reported. The next five in their order

are: Union County, 22¼ per cent; Mifflin County, 22 per cent; Perry County, 20 per cent; Cumberland County; 19 per cent; and Dauphin County 18¾ per cent. The lowest percentage of returns was received from Greene County, from which only 1⅓ per cent. of the sportsmen sent in their reports of game killed.

This tabulation demonstrated conclusively that the figures heretofore used by the Game Commission were consistently below the actual kill. Hundreds of these who reported had killed no game, some not even hunted, still the tabulation shows that the 34,000 licensed hunters who reported killed on an average of more than eight rabbits each, more than two squirrels each and almost one grouse each, with other game generally distributed in proportion. A much better percentage of large game hunters than small game hunters reported. On the same basis, however, it is easy to estimate what the 434,000 licensed sportsmen in Pennsylvania killed last year, which, if added to game killed by those who can hunt legally without license on lands upon which they reside and cultivate, said to number upwards of 200,000 persons additional, will amount to considerably more than the figures of the Game Commission if the same general average holds true.

According to the reports, eight per cent. of the sportsmen in 1920 killed:

Deer	1,163	Blackbirds	17,458
Bear	116	Reedbirds	3,692
Rabbits	278,982	Shorebirds	1,018
Hares	3,965	Wild Cats	83
Squirrels	69,419	Gray Foxes	910
Raccoons	4,631	Red Foxes	846
Wild Turkeys	823	Mink	1,229
Ruffed Grouse	28,619	Weasels	6,552
Ring-neck Pheasants ..	2,373	Stray House Cats	5,086
Quail	4,497	Crows	17,068
Wild Geese	149	Hawks	3,513
Wild Ducks	4,698	Owls	1,339

The average number of days hunted, according to the reports filed, was slightly more than six days per man. Present indications are that the number of reports received for the 1921 season will be far in excess of those received for the 1920 season, with the result that the data from such tabulation will be considerably more valuable than for the 1920 season.

HUNTERS' LICENSES

There are but few changes in the form of the 1921 license. In the hope of having sportsmen understand the necessity for carrying the license on their person and displaying the tag on the middle of the back at all times while hunting as now required by law, a line of large type with a hand pointing to it was placed at the top of the license, reading as follows:

"Save \$20.00. Carry this license and display tag on middle of back while hunting."

In printing the tags, instead of printing on the back of the tag that it is necessary to display the tag in a certain place and thus require a second printing operation, we placed on the face of the tag between the county number and the license number the following:

"Display tag on middle of back"

The result is that the sportsmen apparently understand the requirements under the license law today better than ever before. Indications are that the total issue of licenses for 1921 will be more than 450,000, probably an increase of upwards of 30,000 over 1920. The issuance of non-resident hunters' license will also apparently be somewhat greater than last year.

The decided increase in the number of licenses issued is accounted for by the increased interest our people are taking in outdoor recreation, especially hunting, and the fact that the industrial depression has permitted many men who were otherwise idle to spend some time in the open enjoying the beauties of nature, killing a limited amount of game; and, in most cases, securing some desirable food to add to the family larder.

We were somewhat handicapped in distributing our licenses because of the printers' strike and were compelled to postpone the date for beginning enforcement of the law, but were able to keep up with the demands for licenses pretty well until along in November when the supply for a number of counties was exhausted and we were unable to have our supply of "Special Issue" licenses completed quickly enough to keep all county treasurers fully supplied. In a few cases county treasurers were compelled to issue receipts until the additional supply of licenses could be secured.

Indications are that many hunters who heretofore did unsportsmanlike things on lands whereon they were hunting refrained from doing so this season because the new location for the wearing of the hunter's license tag made identification less difficult.

HUNTING ACCIDENTS

With a larger number of hunters it is self-evident that the number of hunting accidents will also, unfortunately, be quite large. In making a survey of the accidents so far reported it is regrettable to note that a great majority of hunting accidents are the result of carelessness with firearms in the hands of the persons killed, and not accidents occurring because fellow-sportsmen were carelessly shooting at game. The two drastic laws previously referred to in this report controlling the shooting of bullets and imposing severe penalties upon persons shooting others in mistake for wild creatures have undoubtedly helped very materially in reducing the loss

of human life. Data on hunting accidents from all parts of the State will later be collected and given in the addendum.

GAME REFUGES

To date a total of thirty-two (32) refuges have been arranged for, two of which, however, are not yet established. Of these thirty-two (32) twenty (20) are situated on State Forests; five (5) are on leased lands, and five (5) are on Preserves already purchased, and the other two (2), not yet established, on lands for which deeds have not yet been received. The last two mentioned are the Jefferson County and the McKean County Preserves. The Jefferson purchase is being held up due to the fact that there are so many heirs to be dealt with. We received nine separate options for these lands and Mr. Potter tried to arrange that all heirs would execute one deed. However, this was found impossible and he is now working to have all interests execute five deeds. Settlement was further seriously complicated by the death of two of the heirs, one of whom was the attorney-in-fact for two of the other heirs, and the other died leaving children. These complications are being satisfactorily straightened out and are here mentioned simply as an example of the difficulties encountered in purchasing preserves, and the reason for seemingly unnecessary delay in completion of a purchase.

Field work for surveys of the outside lines has been completed for all seven purchases, and preliminary maps available. Considerable map work is still to be done but can not be completed until the lines around the refuges themselves are run, the cost of which will be comparatively small.

We have never had accurate maps of all game refuges on State Forests, so during the past fall an agreement was entered into with the Department of Forestry by which they would make such surveys, providing we furnished three or four men to serve as rodmen and chainmen. Field work for eighteen (18) out of the twenty (20) refuges has been completed and it is expected that the Department of Forestry will shortly supply the Commission a copy of the field notes of each survey. We then will be able to determine the exact acreage comprising each game refuge.

Following is a brief statement concerning the present status of the seven (7) preserve purchases:

Preserve Number	County	Purchase Area: (Acres)	Remarks:
12.....	Bradford	7,492.9.....	Conveyance completed. Refuge established. Survey of boundary completed.
25.....	Elk	6,288.5.....	Conveyance completed. Refuge established. Survey of boundary completed.

Preserve Number	County	Purchase Area: (Acres)	Remarks:
26.....	Bedford, Blair and Cambria	6,485.4 and 2/3 undivided interest in 356.6	Conveyances completed. Refuge established. Survey of boundary and refuge completed.
28.....	Elk	9,142.7.....	Conveyance completed. Refuge established. Survey of boundary completed.
29.....	Warren	8,471.01.....	Conveyance completed except for two lots of 165 acres each. Refuge established. Survey of boundary completed.
30.....	McKean	5,045.9.....	Conveyance not consummated. Survey of boundary completed.
31.....	Jefferson	3,471.4.....	Conveyance not consummated. Survey of boundary completed.

The purchase of lands has been considerably more expensive than estimated because the titles in many cases required a great deal more work than expected, and the surveys were tedious and expensive due to the fact that in most cases no actual surveys had been made of the lands for many years, with the result that old markers, etc., were entirely obliterated.

Conditions at our game refuges in general are considerably better than for sometime past. The buildings at the refuges have been put in first-class repair, roads and firelines put in good condition, so that the maintenance for the next year or two should be considerably less on the old established preserves. We have been fortunate to come through the past year without any serious fires at any of our game refuges or surrounding territory. Food conditions have been improved wherever possible, and more vermin of all sorts was destroyed by our refuge keepers during the past year with the assistance of our trapping instructor than had been killed during any three years previously.

AUXILIARY GAME REFUGES

The eight (8) auxiliary game refuges now established seem to be meeting the expectations of the sportsmen interested with but little difficulty in the administration thereof. These refuges are located as follows:

1. In Perry Township, Clarion County, near Parkers Landing.
2. In Monroe Township, Wyoming County, near Alderson.
3. In southern Tinicum Township, Bucks County.
4. In northeastern Nockamixon Township, Bucks County.
5. In Donegal Township, Butler County.

6. In Tyrone and Strabane Townships, Adams County, near Hunterstown.
7. In South Fayette Township, Allegheny County, near Oakdale.
8. In Wood Township, Huntingdon County, near Robertsdale.

Whether more of these refuges should be established now is a debatable question. It might be advisable to wait until further studies can be made of the results of these auxiliary refuges.

GAME FOR RESTOCKING PURPOSES

During the past year the purchase of game of various kinds, especially Mexican Bob-White quail and cotton-tailed rabbits, was less difficult than at any time during the last five years. Shippers of quail reported that the drought that had continued for several successive years and apparently caused a shortage of quail in northern Mexico had subsided and weather conditions were again more normal, with the result that the number of quail trapped last winter was greater than during the entire time since 1916. We could have purchased during the winter months ten or fifteen thousand quail, but because of our past experiences no birds were accepted for shipment prior to March 1st. According to tabulated statement of game purchased given later in this report, you will note that we purchased and distributed 11,283 bob-white quail in first-class condition.

Cotton-tailed rabbits were available in goodly numbers and we secured and distributed throughout such portions of the State as needed restocking quite badly, as well as in some other sections for the purpose of supplying new blood, a total of 15,423 cotton-tailed rabbits. We also obtained and released 7,540 varving hares, commonly known among our people as snowshoe rabbits.

The available supply of desirable deer and other game has been quite limited for several years past, while the native ruffed grouse cannot be secured in any worthwhile number anywhere in North America. Our sportsmen are constantly becoming more imbued with the thought that if the native birds and animals of Pennsylvania are given proper protection restocking with species foreign to our State will not be necessary.

The number of ring-neck pheasants available last year was somewhat limited because since the war many of the farms previously raising these birds in large numbers have not been able to again get back on a pre-war basis, and because of rather unsatisfactory experiences during 1920 with the distribution of large numbers of ring-neck pheasant eggs, the number of eggs purchased was only a fraction of our distribution heretofore. The majority of the eggs so secured were placed in the hands of our several refuge keepers, with whom the results were apparently better than those secured by general distribution to interested sportsmen. We purchased a total

of 5,389 eggs, from which 2,854 birds were hatched, of which number 1,195 were reared to maturity and released. The average cost of the birds so reared and released was \$1.15 per bird in comparison with \$2.05 per bird in 1920, \$0.96 per bird in 1919, and \$1.04 per bird in 1918. A number of the refuge keepers have on hand a limited supply of birds from which they hope to gather eggs for hatching, as well as for distribution to nearby interested sportsmen.

BEAVER

The colonies of beaver previously established are apparently thriving and increasing in splendid shape. No complaints have yet been received relative to their work except in one instance, where a pair of these animals, not the result of stocking on our part but apparently from an old colony located in the Poconos a number of years ago, have caused some annoyance to a property owner in that section. If this annoyance continues next spring the only remedy will be to trap and remove these animals.

The securing of additional beaver during the past year for stocking purposes has been practically out of the question, and only three additional colonies have been started during the year located as follows:

1. Preserve No. 8 on the Loyalsock Creek, Lycoming County.
2. Preserve No. 4 near New Germantown, Perry County.
3. In Clinton County, on McElhattan Run.

Additional animals have been promised from various directions. Just what the result will be of anticipated trapping operations I am unable to say. Our citizens, however, continue to take a great deal of interest in our effort to re-establish the beaver in Pennsylvania, and desire more colonies established as rapidly as animals are available.

BOUNTIES

The operation of the Pennsylvania bounty system is meeting with the continued approval and support of the sportsmen, and our system of handling the payment of bounties is receiving quite favorable consideration by other States. During the fall of 1920 fur buyers discouraged trapping, among other things reducing the price so decidedly that trappers apparently intended doing but little trapping during the winter of 1920 and 1921. This led us to believe that the total amount of money required for bounties would probably not exceed \$90,000 or thereabouts. When the industrial depression over the whole country became a reality throughout Pennsylvania, many of our unemployed turned their attention to trapping, and regardless of the fact that the Legislature reduced the bounty on weasels from \$2.00 to \$1.50, effective April 1st last, and the mink was taken from the bounty list entirely by the Act of May 17, 1921, the number of bounty claims continued increasing throughout the year, as well be

noted by detailed statement attached, and the total amount of money required to pay the bounties during the past fiscal year was \$128,269.50, consisting of 33,486 separate claims. If the claims for bounties continue pouring into the office at the present rate, as they undoubtedly will so long as this industrial depression lasts, the amount of money necessary to pay the bounties during the 1922 fiscal year will be approximately \$125,000 or more, even though the weasel bounty has been reduced to \$1.50. For the purpose of comparison, I give below a statement covering the payment of bounties since April 15, 1915 up to and including November 30, 1921, as follows:

YEAR:	WILD CAT:	GRAY FOX:	RED FOX:	MINK:	WEASEL:	AMOUNT PAID:
1916*	862	5,124	5,335	4,845	39,111	\$ 70,046
1917	393	3,734	3,336	5,846	44,720	66,614
1918	315	3,310	2,810	4,328	28,631	47,089
1919	442	4,474	4,246	5,189	34,625	69,290
1920	314	4,527	2,295	2,253	53,873	125,184
1921	308	3,372	3,375	3,753	59,755	128,269.50
Totals, ---	2,634	24,541	21,397	23,214	260,705	506,491.50

*Includes bounties paid from April 15, 1915, to Dec. 1, 1916, incl.

Many sportsmen can scarcely believe that since the beginning of our present bounty system we have paid bounties on more than 2,600 wild cats, almost 50,000 foxes and more than 260,000 weasels, requiring a total of more than a half million dollars to pay the bounties without the cost of administration, which including postage, etc., at this time aggregates about \$9,000 per annum. The sportsmen generally agree that probably half as many more of these animals of various kinds, especially weasels, were killed by interested sportsmen for which no bounty was claimed. What the result of the inroads of this horde of destroyers would be were they permitted to go on unchecked is appalling. However, whether we can continue paying even the present rate of bounties on animals of various kinds and at the same time conduct our many other activities on anything like the scale that has prevailed in the past will depend entirely upon the funds available for the use of the Department. Should industrial conditions make a decided improvement, the amount of vermin killed will be materially reduced.

KILL OF VERMIN BY EMPLOYEES

Our field officers during the past year killed vermin as follows:

	Dogs	Stray Domestic Cats	Wild Cats	Gray Foxes	Red Foxes	Minks	Weasels	Opossum	Porcupines	Skunks	Crows	Crow Nests	Hawks	Hawks Nests	Owls	Owl Nests
Game Protectors:	2,281	1,359	7	20	10	26	127	6	36	46	3,325	212	518	36	23	
Game Preserve Keepers:	81	85	43	41	72	37	132	11	196	214	326	15	95	5	20	1
Totals.	2,362	1,444	50	61	82	63	259	17	232	260	3,651	227	603	41	43	1

SONG AND INSECTIVOROUS BIRDS

Observers agree that song and insectivorous birds are increasing throughout the entire United States and that some species, the life-work of which may be considered entirely beneficial, have even increased to a point where inroads upon fruit and berry crops are becoming a serious question. Unfortunately, the planting of food of various kinds for our birds has not kept pace with the laws giving additional protection, and in a number of States during the past summer the Federal authorities saw fit to issue permits for the killing of robins during fruit and berry seasons. Your resolution of July 1st, 1921 on this subject was as follows:

"The attention of the Board was called to the fact that the Federal Government has been issuing permits to persons to kill robins from May 16th to July 15th when these birds are destroying cherries, berries, and other small fruit.

"The Board was unanimously of the opinion that if the robins are so numerous as to be seriously destructive, the proper time to reduce them would be in the autumn and not in the nesting season.

"The laws of Pennsylvania do not give authority to the Board of Game Commissioners, or to any citizen, to kill robins or any other insectivorous birds at any time."

This seems to meet with the entire approval of the great majority of our citizens.

CO-OPERATION WITH OTHER DEPARTMENTS

The field force of this Department continues co-operating as closely as possible with the forces of the Department of Forestry, Department of Fisheries, State Police, as well as with the Department of Agriculture, in the latter instance in the enforcement of the dog license law, as required by Act of Assembly. The manner in which these several field forces are co-operating is being favorably commented upon by sportsmen in all portions of the State, and this condition will undoubtedly vastly improve conditions in the future.

STATUS OF FUNDS

From tabulated statements attached you will note the amounts expended from our funds during the past fiscal year, which expenditures, because of conditions that are entirely unavoidable, are considerably greater than will be possible in the future. It has developed that the demands made upon our officers during the past year because of unemployment has resulted in a greater expenditure for

traveling expenses than was anticipated, also that the demands for special assistance have required quite a large amount for this purpose, but the results secured from these expenditures fully justify them. While it was anticipated that completing the titles and deeds in connection with the purchase of lands, surveys, etc., would cost considerable money because of the nature of the titles and the fact that old land marks had been obliterated years ago, the funds necessary to complete this work were considerably in excess of original estimates. The erection of substantial, permanent buildings as places of residence on our new refuges has also required more money than set aside for this purpose, because Members of the Board having supervision over the erection of such buildings deemed it advisable to build more substantially than first anticipated. Another item that ran higher than originally calculated upon was expressage on game due to high express rates prevailing during the year, also as directed by you more game was purchased than had first been decided upon because it was thought advisable to secure it while available.

On the following pages you will find detailed statements relative to bounties paid, status of funds, etc. Prior to the date of your annual meeting data will be prepared relative to game killed, hunting accidents and number of licenses issued, to be attached to this report in the form of an addendum.

STATEMENT COVERING GAME OF VARIOUS KINDS PURCHASED AND RELEASED, GAME SECURED AND HELD FOR LIBERATION SPRING OF 1922 AND GAME CONTRACTED FOR BETWEEN DECEMBER 1, 1920 AND NOVEMBER 30, 1921.

GAME RELEASED: (In addition to game held per 1920 Report.)

Deer,	54
Wild Turkeys,	94
Ring-neck Pheasants,	1,768
Ring-neck Pheasant Eggs,	5,389
Rabbits (Cotton-tail),	15,423
Varying hares (Snow-shoe rabbits),	7,540
Quail, Bob-white,	11,283
Beaver,	13

GAME PURCHASED AND DELIVERED: (Held for liberation this coming spring.)

Ring-neck Pheasants,	1,114
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GAME PURCHASED OR CONTRACTED FOR TO BE DELIVERED: (Prior to July 1, 1922.)

Deer,	100
Wild Turkeys,	75
Ring-neck Pheasants,	528
Rabbits, (Cotton-tail)	20,000
Varrying Hares,	3,000
Quail, Bob-white,	15,000
Fox Squirrels,	2,000
Beaver,	50

SUMMARY SHEET OF BOUNTY CLAIMS ALLOWED ON NOXIOUS ANIMALS DURING THE YEAR OF DECEMBER 1ST 1920, TO NOVEMBER 30TH 1921, INCLUSIVE.

County	Fox					Amount
	Wildcat	Gray	Red	Mink	Wease	
Adams,	0	104	5	5	458	\$ 1,016 50
Allegheny,	2	3	3	19	328	643 00
Armstrong,	0	0	4	58	1,488	2,753 00
Beaver,	0	0	29	20	141	344 50
Bedford,	1	231	33	81	965	2,286 00
Berks,	0	49	30	9	984	1,877 00
Blair,	0	74	49	35	662	1,434 00
Bradford,	4	117	215	245	2,336	5,340 50
Bucks,	0	13	16	16	612	1,190 00
Butler,	0	0	17	77	2,321	4,252 50
Cambria,	0	28	40	102	705	1,523 00
Cameron,	18	17	38	32	112	504 50
Carbon,	6	9	8	19	238	513 00
Center,	7	108	125	28	1,259	2,815 50
Chester,	0	5	24	40	744	1,433 00
Clarion,	0	2	60	116	2,089	3,984 50
Clearfield,	8	69	114	119	1,657	3,586 00
Clinton,	38	62	38	4	356	1,131 00
Columbia,	12	38	26	55	1,291	2,612 00
Crawford,	0	6	24	258	3,475	6,645 50
Cumberland,	2	104	10	4	638	1,380 00
Dauphin,	3	85	24	7	719	1,492 00
Delaware,	0	0	0	0	39	69 50
Elk,	26	17	93	72	678	1,837 00
Erie,	0	0	12	124	1,927	3,585 00
Fayette,	6	93	22	80	426	1,147 00
Forest,	8	0	67	54	712	1,621 50
Franklin,	3	142	22	18	543	1,326 50
Fulton,	3	128	3	33	309	870 00
Greene,	0	3	17	8	175	375 50
Huntingdon,	4	225	88	66	917	2,326 00
Indiana,	0	33	19	79	1,298	2,534 50
Jefferson,	2	7	45	103	1,872	3,572 00
Juniata,	4	127	16	13	551	1,289 00
Lackawanna,	1	36	50	23	368	905 50
Lancaster,	0	4	28	5	802	1,443 50
Lawrence,	0	0	3	12	534	1,004 00
Lebanon,	0	3	9	1	358	635 00
Lehigh,	0	19	5	5	474	874 50
Luzerne,	13	45	19	120	1,680	3,390 00
Lycoming,	15	84	115	101	1,477	3,270 50
McKean,	12	3	130	96	1,683	3,738 50
Mercer,	0	0	6	104	1,557	2,996 50
Mifflin,	9	101	42	17	567	1,370 50
Monroe,	15	56	33	70	556	1,384 00
Montgomery,	0	18	2	10	489	\$916 00
Montour,	0	3	0	6	290	527 50
Northampton,	0	35	5	43	402	849 00
Northumberland,	0	19	11	9	759	1,427 50
Perry,	1	178	54	10	877	2,025 50
Philadelphia,	0	0	0	0	18	31 00
Pike,	14	31	32	64	258	798 50
Potter,	9	4	214	75	1,233	3,008 00
Schuylkill,	0	61	18	32	927	1,901 50
Snyder,	0	25	25	17	541	1,064 00
Somerset,	6	203	49	193	1,306	3,121 00
Sullivan,	21	18	112	43	435	1,232 50
Susquehanna,	0	157	238	89	742	2,246 50
Tioga,	13	38	290	125	969	2,683 50
Union,	1	23	13	30	309	679 50
Venango,	1	0	40	87	1,954	3,854 50
Warren,	10	6	102	134	1,592	3,372 00
Washington,	0	0	46	7	327	704 00
Wayne,	4	59	193	80	506	1,568 50
Westmoreland,	4	116	27	76	1,111	2,421 00
Wyoming,	2	101	68	68	683	1,676 50
York,	0	27	55	2	906	1,723 50
Totals,	308	3,372	3,375	3,753	59,755	\$128,269.50
Recertified claims paid by this Department,						30 00
						\$128,299 50

COMPARATIVE STATEMENT BY MONTHS OF BOUNTY CLAIMS ALLOWED ON NOXIOUS ANIMALS DURING THE PAST THREE FISCAL YEARS.

1919	Fox					Amount
	Wildcat	Gray	Red	Mink	Weasel	
December	84	465	618	1,306	4,525	\$ 8,501
January	140	1,211	1,416	1,521	6,818	14,433
February	67	1,001	921	911	4,418	9,575
March	84	1,072	681	814	4,444	9,263
April	18	238	211	218	1,975	3,199
May	19	82	88	46	1,015	1,515
June	3	76	67	26	1,301	2,052
July	2	33	39	39	1,660	3,147
August	5	27	19	39	1,778	3,436
September	1	28	17	54	1,537	3,025
October,	8	51	26	52	1,858	3,753
November,	11	190	143	183	3,296	7,345
Total,	442	4,474	4,246	5,189	34,625	\$69,254
Recertified claims paid by this Dept.						36
Grand total,						\$ 69,290

1920	Fox					Amount
	Wildcat	Gray	Red	Mink	Weasel	
December	54	541	430	733	10,209	\$ 23,254
January	108	1,603	920	631	10,811	27,858
February	38	941	303	253	5,565	14,039
March	61	958	256	185	5,450	13,894
April	23	223	132	63	3,476	7,834
May	6	47	56	24	1,944	4,130
June	3	24	50	30	2,303	4,771
July	0	36	35	58	3,208	6,595
August	1	25	12	51	3,655	7,421
September	2	33	12	30	2,345	4,821
October	2	23	20	40	2,030	4,198
November	16	73	69	147	2,877	6,311
Total,	314	4,527	2,295	2,253	53,873	\$125,156
Recertified claims paid by this Dept.						28
Grand total,						\$125,184

1921	(Fox)					Amount
	Wildcat	Gray	Red	Mink	Weasel	
December	30	259	231	607	7,414	\$16,637 00
January	66	519	776	1,212	9,322	22,959 00
February	63	762	854	856	7,132	18,832 00
March	79	1,016	741	840	8,101	21,173 00
April	22	212	118	147	3,141	7,126 50
May	7	76	126	40	1,854	3,837 50
June	4	94	146	20	2,699	4,905 00
July	2	78	45	6	4,266	6,859 00
August	3	60	58	11	4,947	7,858 50
September	3	32	40	6	2,981	4,743 50
October	5	44	34	6	2,850	4,577 50
November	24	220	206	2	5,048	8,723 00
Total,	308	3,372	3,375	3,753	59,755	\$128,269 50
Recertified claims paid by this Dept.						30 00
Grand total,						\$128,299 50

FINANCIAL STATEMENT

Covering period from December 1st, 1920, to November 30, 1921, Inclusive.

GAME PROTECTION AND PROPAGATING FUND.

Balance in State Treasury Dec. 1st, 1920	\$ 89,525.46	
DEPOSITS:		
One-half net revenue from Hunter's Licenses deposited in this fund during fiscal year	\$ 219,295.75	
Portion of penalties, costs, etc., deposited with this fund	49,878.68	
		269,174.43
Total		\$ 358,699.89
Transferred from Bounty Fund and included in the Disbursements below, which also includes moneys drawn from the Bounty Fund for the purchase of lands		362,248.85
		\$ 720,948.74
DISBURSEMENTS:		
Salaries of Game Protectors, Assistant Game Protectors, and general office force	\$ 146,673.08	
Expenses of salaried officers	83,571.10	
Salaries and expenses of Special Deputy Game Protectors employed for special duty	30,059.47	
Salaries of Game Preserve Keepers	27,032.17	
Expenses of Game Preserve Keepers, purchase and erection of telephones, buildings, supplies, etc., for twenty-four preserves	20,768.43	
Expenses of Game Preserve Keepers, purchase of buildings repairs, supplies, titles, surveys, etc., on newly established preserves and preserves under process of completion, eight in number	30,405.38*	
Expenses on eight Auxiliary Game Preserves	189.98	
Game purchased and distributed	62,349.27	
(Refunds from carriers for losses \$ 2,168.99)		
Expenses in caring for game held for liberation	1,859.99	
Expressage on game, etc.	16,326.57	
(Express refunds \$ 656.96)		
Grain and feed purchased for feeding game	5,144.59	
Advertising the closing of counties, and the setting aside of certain streams within the game preserves as nursery streams, etc.	589.91	
Bounties paid on dogs killed while chasing deer	125.00	
Attorney fees	972.90	
Postage	1,266.55	
Purchase and upkeep of automobiles owned by the Department and upkeep of motor-boats,	12,917.50	
Purchase of Lands:		
Bradford Co., Preserve No. 12	\$18,732.25	
Bedford & Cambria Cos., Preserve No. 26	22,072.67	
Elk & Warren Cos., Preserve No. 28	22,856.67	
Warren County, Preserve No. 29 ..	21,837.53	85,499.12
Badges for Special Deputy Game Protectors,		140.00
Cost of physical examination of officers		50.00
Cost of tabulation of Hunters' Reports of Game killed during open season, 1920 (This includes \$220.00 worth of cards on hand for 1921)		532.56
Compilation of 1921 Game, Fish and Forest law pamphlets		100.00
Miscellaneous	1,014.83	527,588.40
Balance		\$ 193,360.34
Money in bank		806.30
Balance in this fund November 30, 1921		\$ 194,166.64

*This item includes title examinations, preparations of deeds and complete surveys on tracts being purchased in Jefferson and McKean Counties, also practically all expenses in connection with new preserve in Elk County purchased during 1920.

BOUNTY FUND

Balance in Bounty Fund on December 1, 1920, \$ 412,727.78

DEPOSITS:

One-half net revenue from Hunter's Licenses deposited in this fund during fiscal year	\$ 219,295.75	
Portion of penalties, costs, etc., deposited with this fund	17,651.88	
Revenue from salvaged skins sold to fur companies	2,092.69	
Re-deposits of checks sent out by Bounty Division and returned undelivered	316.00	
Re-deposits of checks written in error	24.00	239,380.32
Total		\$ 652,108.10

DISBURSEMENTS:

Bounties from December 1st, 1920, to November 30, 1921, inclusive, per detailed list attached to this report	\$ 128,299.50	
Salaries, employees of Bounty Division	6,835.00	
Postage	2,606.26	
Miscellaneous equipment for use of Bounty Division ..	22.75	137,763.51
Balance		\$ 514,344.59
Transferred from Bounty Fund to Game Protection and Propagating Fund, and included in the disbursements from the Game Protection and Propagating Fund		362,248.85
Net balance in Bounty Fund Nov. 30, 1921		\$ 152,095.74
Money in bank (Per checking account of Bounty Division) ..		7,717.50
Total unexpended balance in Bounty Fund November 30, 1921		\$159,813.24*

NOTE: Because of vouchers, etc., in course of settlement the difference between the balances shown on our books and balances shown on the books of the State Treasury Department will vary slightly from time to time.

QUARTERLY STATEMENT

December 1st, 1920 to February 28th, 1921.

DR.

To balances in bank at close of last quarter	3,183.58	
To warrants on appropriation	61,000.00	
To warrants—Direct Requisition	37,340.70	
To penalties and costs collected	17,167.28	
To proceeds of guns sold	173.85	
To proceeds of Taxidermists' licenses	69.00	
To proceeds of Propagating licenses	9.00	
To proceeds of Ferret Owners' licenses	25.00	
To proceeds of Special licenses	2.00	
To proceeds of Ordinary licenses	1.00	
To proceeds of Non-Resident licenses.....	50.00	\$ 119,021.41

*Of this balance in the Bounty Fund, approximately \$20,000.00 will be used to purchase lands under contract for game refuge purposes during the coming fiscal year.

By deposits in State Treasury	17,497.13	
By expenses during quarter	100,299.76	117,796.89
		<hr/>
Balance March 1st, 1921	\$	1,224.52

DR.

To balances in bank at close of last quarter	1,224.52	
To warrants on appropriation	37,000.00	
To warrants—Direct Requisition	37,539.14	
To penalties and costs collected	15,495.32	
To proceeds of guns sold	221.50	
To proceeds of Taxidermists' licenses	21.00	
To proceeds of propagating licenses	10.00	
To proceeds of Ferret Owners' licenses	16.00	
To proceeds of Ferret Breeders' licenses	25.00	
To proceeds of Special licenses	8.00	
To proceeds of Ordinary licenses	4.00	\$ 91,564.48

By Deposits in State Treasury	15,800.82	
By expenses during quarter	74,657.93	90,458.75
		<hr/>
Balance June 1st, 1921	\$	1,105.73

DR.

To balances in bank at close of last quarter	1,105.73	
To warrants on appropriation	37,000.00	
To warrants—Direct Requisition,	6,381.26	
To penalties and costs collected,	15,816.97	
To proceeds of guns sold,	286.35	
To proceeds of Taxidermists' licenses,	18.00	
To proceeds of Propagating licenses,	1.00	
To proceeds of Ferret Owners' licenses,	24.00	
To proceeds of Non-Resident licenses,	10.00	\$ 60,643.31

By deposits in State Treasury,	16,156.32	
By expenses during quarter,	41,279.11	57,435.43
		<hr/>
Balance, September 1st, 1921		3,207.88

DR.

To balances in bank at close of last quarter	3,207.88	
To warrants on appropriation	35,000.00	
To warrants—Direct Requisition	15,845.46	
To penalties and costs collected	21,464.77	
To proceeds of guns sold	282.75	
To proceeds of Taxidermists' licenses	73.00	
To proceeds of Propagating licenses	10.00	
To proceeds of Ferret Owners' licenses	30.00	
To proceeds of Ferret Breeders' licenses	50.00	
To proceeds of Ordinary licenses	1.00	
To proceeds of Non-Resident Hunter's licenses	590.00	\$ 76,554.86

By deposits in State Treasury.	22,501.52	
By expenses during quarter,	53,247.04	75,748.56
		<hr/>
Balance in Bank, December 1st, 1921	\$	806.30

SETH E. GORDON,
Secretary, Game Commission.

ADDENDUM.

Harrisburg, Pa., January 5, 1922.

In addition to data contained in the annual report, below is given information relative to game killed, hunting accidents, licenses issued, etc., which data has been compiled since the preparation of the report to the Game Commission. A complete tabulation of reports from sportsmen on game killed, as well as the final checking of reports covering the issuance of licenses, will probably change somewhat the figures below given. According to information already in hand the figures on game killed are fairly accurate.

GAME SEASON OF 1921.

Number	Kind	Estimated Weight of Each	Total Weight
4,840	Deer, { Spike bucks ----- 639 2 points to one antler, ----- 796 3 " " " " ----- 1248 4 " " " " and larger ----- 2157	130 lbs.	629,200 lbs.
510	Bears, -----	200 "	102,000 "
3,600,000	Rabbits, -----	2 "	7,200,000 "
500,000	Squirrels, -----	1 "	500,000 "
34,200	Raccoons, -----	9 "	307,800 "
4,654	Wild Turkeys, -----	12 "	55,848 "
325,000	Ruffed Grouse, -----	1 ½ "	487,500 "
15,400	Ring-neck Pheasants, -----	2¾ "	42,350 "
49,885	Virginia quail, -----	6 oz.	18,708 "
500	Hungarian quail, or partridge, -----	10 "	312 "
35,250	Woodcock, -----	6 "	13,218 "
46,780	Wild waterfowl, -----	3 lbs.	140,340 "
	Total weight, -----		9,497,277 "
	Reduced to tons, equals -----		4,749 tons

The above does not include 22,000 shore birds of various kinds nor about 254,000 black birds reported killed. There were also 68 male fawns and 213 doe deer illegally killed during the season.

* 21 counties closed.

HUNTING ACCIDENTS

	1915	1916	1917	1918	1919	1920	1921
Fatal accidents, -----	29	30	28	19	35	43	29
Non-fatal accidents, -----	119	102	75	48	128	85	130

18 fatalities (62%) and 43 accidents not fatal* (33%) were self inflicted. 2 fatalities (7%) occurred through being mistaken for game, one for a bear, and the other for a raccoon, while 4 persons (3%) were slightly injured in mistake for wild creatures. 9 persons (31%) were killed and 83 wounded (64%) through firearms accidentally or carelessly discharged by others.

HUNTING LICENSES ISSUED

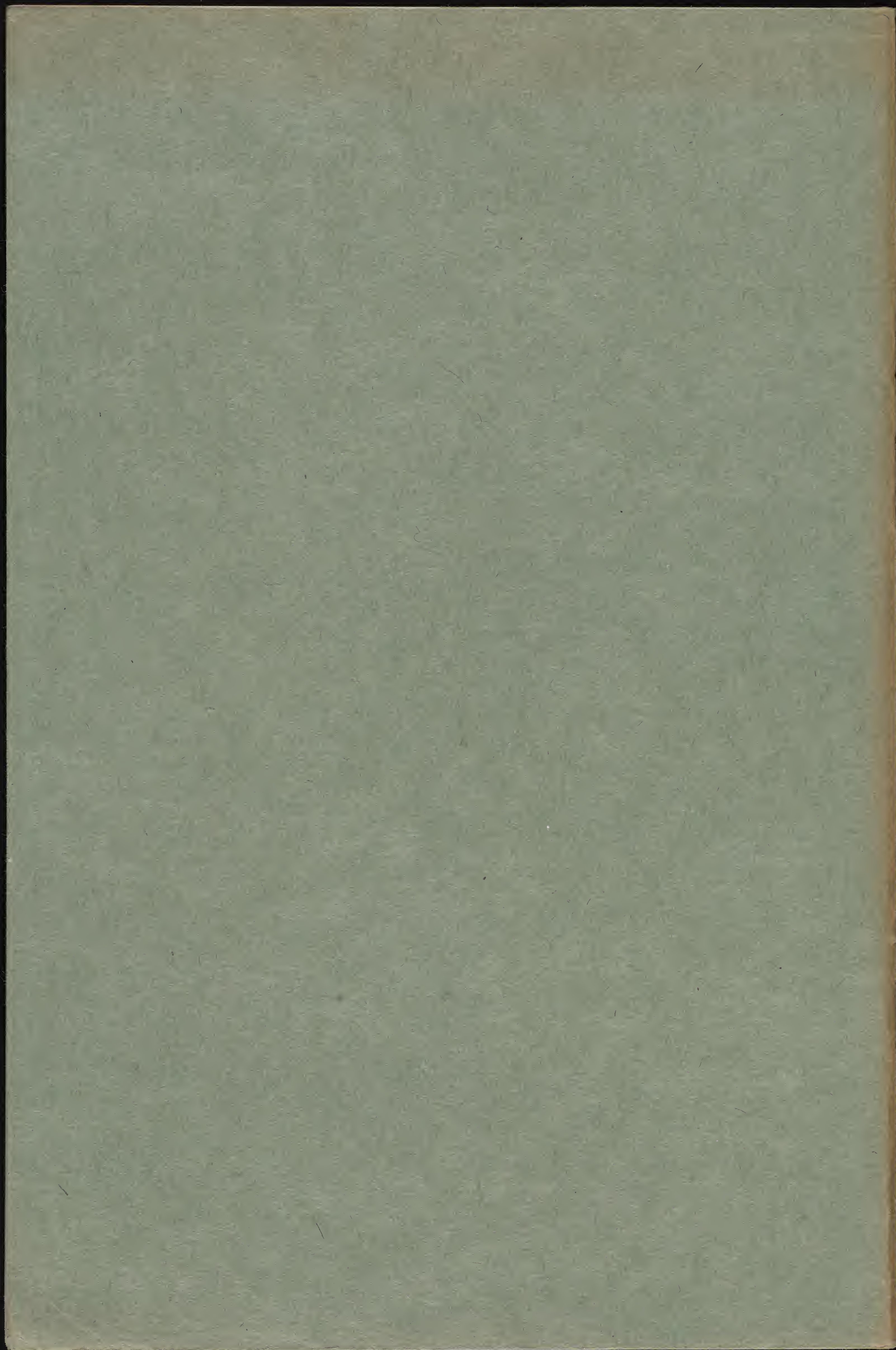
	1915	1916	1917	1918	1919	1920	1921
Resident, -----	262,355	290,422	315,474	311,290	401,130	432,240	462,371
Non-resident, -----	532	662	588	478	1,128	1,725	1,761

SETH E. GORDON.

Secretary, Game Commission.







ANNUAL REPORT
OF THE
Board of Game Commissioners
OF THE
COMMONWEALTH OF PENNSYLVANIA
INCLUDING A
REPORT OF THE CHIEF GAME PROTECTOR
TO THE COMMISSION
FOR THE
YEAR 1919

HARRISBURG, PENNA.
J. L. L. KUHN, PRINTER TO THE COMMONWEALTH
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REPORT OF THE BOARD OF GAME COMMISSIONERS

Harrisburg, Pa., January 8, 1920.

To His Excellency, William C. Sproul, Governor of Pennsylvania:

Sir: In pursuance of the provisions of the Act of June 25th, 1895, P. L. 273, we the undersigned Members of the Board of Game Commissioners of Pennsylvania make report to you covering the present status of our work as well as accomplishments during the past year, and include the Report of our Acting Secretary for your further information on the various phases of our work.

OBITUARY.

DR. JOSEPH KALBFUS, SECRETARY AND CHIEF GAME PROTECTOR. While accompanying two of our number on an inspection tour of tracts of land proposed for use as State Game Preserves, Dr. Joseph Kalbfus, of Harrisburg, Pa., Secretary to our Board since October 1st, 1895, and in that capacity Chief Game Protector and Executive Officer of the Department, was most tragically killed at Farley Road Crossing near Tiona, Warren County, about noon Sunday, August 10th, 1919, when the automobile in which he was riding was struck by an east-bound express train moving at a high rate of speed. We are advised by the Highway Commissioner that this dangerous railroad crossing is to be eliminated at the earliest possible date. Several of the Members of this Board have been closely associated with the work of Dr. Kalbfus in the performance of his duties as Chief Game Protector for many years and are confident the public service of Pennsylvania or any other State never had an official more devoted to his vocation and the conscientious, impartial discharge of his official duties. When he became Executive Officer of this Commission he did so upon invitation of the Board, the Members of which at that time realized that because of his early training and experience he could not only successfully discharge the duties then devolving upon him, but in addition could with proper support financially and otherwise build up the work of wild life conservation in Pennsylvania to the nation-wide prominence it has attained.

The counsel of Dr. Kalbfus was frequently solicited by those interested in wild life conservation in other States of the Union, and the adoption of many of his policies in game and wild bird protection by them bears testimony to the high regard for his judgment and advice by officials and sportsmen interested.

It is needless to say our work will seriously miss the leadership of Dr. Kalbfus and each of us mourns the loss of a most valuable co-worker and friend.

E. W. KELLY, FIELD SUPERINTENDENT. Mr. Kelly, who was driving the automobile in which Dr. Kalbfus was riding when killed, was also killed almost instantly at Farley Road Crossing on Sunday, August 10th, 1919. He became a member of our field force on August 1st, 1913, and brought to the work many years of valuable experience as a sportsman and in dealing with men through superintending large lumber operations. He was a conscientious, earnest officer who did his utmost at all times to improve game conditions throughout the State. His special work during the past three years was in the capacity of Field Superintendent, having direct charge of our Game Preserve work, both locating and establishing new preserves as well as supervising the work on preserves already created, all of which service he was admirably fitted to perform.

In addition to the game preserve work Mr. Kelly assisted in the supervisory work among our field officers as well as devoted a portion of his time to educating the people of the State, especially the sportsmen, to the benefit of game and wild bird protection. His influence and experience secured a hearty response wherever he went. His loss to the work of the Department is keenly felt.

NEW LEGISLATION.

Among the most important legislation passed by the recent Session and approved by your Excellency are, (1) the Act giving the Game Commission authority to expend not to exceed \$100,000, during the first year, of the accumulated revenue from the Hunters' Licenses and not to exceed \$50,000 annually thereafter in purchasing suitable lands for game preserves where the State does not already own available lands; (2) the act making the creation of Auxiliary Game Preserves more flexible so as to meet the varied conditions that must be overcome in order to place these sanctuaries in numbers desired by sportsmen throughout the Commonwealth; (3) the act increasing our power to appoint Game Protectors to permit the proper administration of our field work; and (4), the act changing the system for the payment of bounties so as to expedite the proper handling of that matter.

Acts of lesser importance are (1), the act changing some of the small game seasons as desired by sportsmen; (2) the act making a return of twenty-five per centum of the penalty to persons who through mistake kill an illegal large game animal; (3) the act requiring foreign-born residents to present naturalization papers when applying for a Resident Hunter's License so as to keep these people from unknowingly as well as intentionally violating the law; and (4) the act denying a division of penalties collected from unnaturalized foreign-born residents for violating either the Alien Dog Law or the Alien Firearms Law.

We are satisfied that the laws now on our statute books relative to game and wild birds are the most comprehensive laws on the subject found in any State in the Union, and but few minor changes and additions need be made to meet the demands of changing conditions. A number of other States have followed the leadership of Pennsylvania on various phases of our work and have enacted statutes very similar to those in force in this State, this being especially true of our game preserve law, the buck deer law and the alien law.

PURCHASE OF LANDS FOR PRESERVES.

The death of our Secretary and our Field Superintendent has considerably delayed the consummation of plans for the purchase of suitable lands in various sections of the State, although we are moving as rapidly as conditions prevailing in desirable territory will permit. Much difficulty is experienced in getting in touch with land-owners, many of whom live in distant parts of the United States, also in overcoming obstacles in the way of oil, gas, mineral, timber and other leases. However, unless unforeseen conditions arise the entire amount allotted to our use for this purpose will be judiciously expended and preserves located in portions of the Commonwealth where otherwise no lands for this purpose would be obtainable.

CREATION OF AUXILIARY GAME PRESERVES.

Since the passage of the new Auxiliary Game Preserve Act the sportsmen have not had time to become sufficiently acquainted with this phase of our sanctuary work to make any material progress, but during the coming spring and summer we believe many desirable sanctuaries of this character will be added to the game preserve system of the State. These preserves are particularly beneficial in increasing small game of all kinds.

INCREASE OF GAME PROTECTORS.

The act increasing our appointive power to not more than eighty Game Protectors, including men assigned to office duty, has permitted us to organize our field work in a systematic and business-like manner that is already proving very beneficial throughout. Since the death of Mr. Kelly, our Field Superintendent, who had special charge of the preserve work, we have abolished that position and have appointed additional supervisory officers, known as Traveling Game Protectors. These officers now numbering ten are each assigned to a given territory and the duties heretofore performed by the Field Superintendent imposed upon them in their respective districts. The supervisory officers assist the Protectors in charge of county districts and the Preserve Keepers; also perform special work separately when necessary, and conduct an educational campaign among the people heretofore impossible. Improved conditions are already apparent, and time will further demonstrate the undoubted value of this change in our field organization.

CHANGE IN SYSTEM FOR PAYMENT OF BOUNTIES.

The act changing the method for the payment of bounties has already proved to be a very desirable piece of new legislation. Under the old system a delay of sixty to ninety days always occurred from the time the claim was received at our Bounty Division until the claimant received his check from the State Treasurer, while under the present system the check is sent out by return mail whenever possible. At no time is payment delayed more than a week or ten days.

MISCELLANEOUS.

The act making changes in certain small game seasons has partially met the desires of sportsmen, although sentiment in favor of a synchronous season for all small upland game is constantly growing stronger and the next Legislature will no doubt be importuned to open and close the season on rabbits, squirrels, ruffed grouse, ring-neck pheasants, quail, etc., on the same dates. If this can be brought about conditions will be materially improved.

The act returning a portion of the penalty to persons who through mistake kill an illegal deer or elk while not generally understood among sportsmen this season because of the State Printer's delay in delivering the new Game Law Pamphlets is meeting the entire approval of sportsmen. Reports made by our Acting Secretary since the date of his annual report indicate that a number of good sportsmen who actually made mistakes and killed illegal deer came forward immediately and acknowledged their error as well as dressed and hung up the carcass as required by this act. They later received a return of one-fourth of the penalty paid. When this law becomes more thoroughly understood we are sure less carcasses of illegal deer will be left lying in the forests to decay, as the men who make an error will have an incentive besides good sportsmanship to come forward and acknowledge same.

County Treasurers assisted splendidly in seeing to it that all foreign-born residents presented naturalization papers before being issued a Resident Hunter's License, and these people were caused but little trouble this year through improperly issued licenses.

Since the passage of the act denying a division of penalties collected from aliens under the Alien Dog Law and the Alien Firearms Law we are pleased to report that but few complaints of persecutions among the foreign-born residents of the State, as was formerly the custom, have reached us. Our several salaried officers are at this time, as in the past, making a special effort to educate these people to the provisions of these laws without the imposition of penalties, although in some cases apparently the only remedy is to impose penalties in order that the provisions of this law must be obeyed.

GAME CONDITIONS.

Information gathered by us individually as well as through the Department indicates that game conditions generally were more favorable throughout the State this year than for some time past. Reliable data recently obtained satisfies us that we have more game of various kinds left over in the covers of Pennsylvania at this time than at the close of any season for at least five years past. Many sportsmen as well as old experienced employees from whom information on this subject has been solicited are all positive in their statements that rabbits, squirrels, ruffed grouse, quail, deer, and bear are all found in sufficient number in practically all sections of the State to supply considerably better hunting next fall than the sportsmen enjoyed this year regardless of the fact that during the season just closed 401,130 Resident Hunters' Licenses and 1,128 Non-Resident Hunters' Licenses were issued. The highest number of Resident Licenses heretofore issued in any one year was 315,474 in 1917.

The number of farmers and their tenants who are permitted to hunt without a license added to the licensed hunters this year we are confident will make a total of not less than 600,000 men who hunted for game in Pennsylvania this year. This increase in the number of hunters is very largely attributable to improved game conditions and the prominence our work has attained.

During the close season of one year placed on ruffed grouse these birds apparently increased nicely in all sections of the State where they had not been too closely killed off prior to that action, but in sections where they had almost been exterminated they were barely able to survive and in such sections perceptible increase has been noted. However, many sportsmen who hunted for grouse during the early part of the season and found birds scarce were surprised to find them fairly plentiful in the same territory during the latter part of November and the deer season. If we are fortunate in having a favorable hatching and rearing season this coming spring the grouse will again be fairly plentiful.

The wild turkeys of the State are increasing rapidly and the sportsmen generally are well pleased with the results obtained. Some of these birds will be trapped and transferred to other suitable sections if weather conditions are favorable, in this way distributing turkey hunting over a larger portion of the Commonwealth.

Deer are increasing very rapidly, the total number of legal bucks killed this year being 2,913 in comparison with 1,754 last year, which had been the highest number killed in any one year previous. If the same ratio of increase continues it will be but a matter of a short time until the annual kill of legal male deer in Pennsylvania will outdo any other State in the Union.

The bear have increased very rapidly and in some sections are becoming somewhat of a menace to the welfare of the inhabitants, not so much because of the actual damage done as the undesirable effect upon the increase of sheep and other livestock in those sections. Farmers become fearful and discouraged, frequently disposing of their flocks lest the bears begin destroying their sheep, and we believe it would again be advisable to permit through proper legislation the use of pens for the taking of bears. If deemed necessary the number of bears that may be taken in one pen in one season can be limited.

The elk introduced are apparently increasing nicely, although complaints relative to damage and annoyances continue reaching us. Our previous conclusion that Pennsylvania does not afford sufficiently extensive range for elk is without doubt correct, although the opening of the season in 1921 may have a desirable effect and cause these animals to retreat to more extensive range areas.

We invite your attention to the addendum to our Secretary's report relative to game killed, etc., which data we believe is accurate concerning the kill of large game and quite authentic relative to small game of various kinds killed during the season just closed.

HUNTING ACCIDENTS.

According to data collected there were 35 fatal hunting accidents and 128 non-fatal accidents during the hunting season just closed, as compared with 19 fatal accidents and 48 non-fatal accidents during

the season of 1918. With a considerably larger number of hunters than ever before it is to be expected that there will also be more accidents, but it does seem to us that the number of such accidents is unnecessarily large. From data collected we are satisfied that approximately 75% of these accidents occur through the careless use of firearms by boys from 14 to 17 years of age. How to materially reduce the percentage of accidents is a difficult question. Many sportsmen throughout the State today feel that no boy under 17 years of age should be permitted to carry firearms unless accompanied by a parent or other responsible adult. This would no doubt help materially and overbalance the inconvenience caused such boys who desire to hunt.

We regret exceedingly to report that during the deer season just closed a man was killed in mistake for a deer. This is the first year since 1914 that this has occurred. This shooting occurred in Huntingdon County when A. L. Stapleton, a local resident, shot and killed Chalmers Horton, of Mount Union, leaving a wife and a number of small children. In the hope that deaths of this sort may be materially reduced if not entirely eliminated we would recommend the passage of an act similar to the bill proposed by Hon. J. G. Dell, of Huntingdon County, in the 1915 Session of the Legislature, which provided that if a man shot another in mistake for game of any kind he should be indictable for manslaughter, and the law-abiding sportsmen throughout the State are heartily in favor of a bill of this kind. A liberal dissemination of the contents of an act of this sort would undoubtedly prove a very beneficial deterrent at least to persons disposed to be careless in this respect.

GAME SANCTUARIES.

Our system of game sanctuaries is undoubtedly the most practicable method yet devised to increase our native game of various kinds. Each of these preserves is producing more desirable game each year than we could hope to raise on any game farm, and many other States are adopting this method to increase their native game supply. States where game farms have been in vogue for a number of years are also adopting this plan in a number of instances.

While we at this time have but twenty-four regular game preserves and six auxiliary game preserves, we hope to establish not less than twelve to twenty additional preserves within the next year with as many of the auxiliary preserves as can be properly located.

BOUNTIES.

The method now used for the payment of bounties on noxious animals of various kinds in Pennsylvania is by far the best bounty system in use in the United States today. The sportsmen generally are well pleased with the results secured and fraudulent claims have practically been eliminated. Our records show that during the past fiscal year bounties were paid on 442 wild cats, 4,246 red foxes, 4,474 grey foxes, 5,189 minks, and 34,625 weasels, the moneys so paid out aggregating \$69,254.00. Bounties are paid at the rate of \$6.00 each for wild cats, \$2.00 each for foxes, and \$1.00 each for minks and weasels killed prior to June 1st, since which time the bounty is \$8.00

for wild cats and \$2.00 each for weasels. The increase in bounties as made in the new bounty act at the instance of sportsmen is undoubtedly inducing more people of the Commonwealth to make a special effort to destroy these enemies of game and wild birds. Time alone will demonstrate the benefit of this phase of our work.

PURCHASE OF GAME.

Repeated efforts demonstrate beyond question that we can never hope to materially increase game of any kind through releasing birds and animals that may be purchased, principally because no desirable game of any kind can be secured in sufficient quantities. We are, therefore, putting forth our utmost effort to improve conditions so that our native game may increase to the maximum. We are encouraging the planting of nut-bearing trees of all kinds, mulberry trees, sweet cherry trees, etc., wherever possible, and in the vicinity of our sanctuaries every effort possible is being made to supply a goodly variety of food of all kinds for game as well as wild birds.

RE-STOCKING BEAVER.

In an endeavor to re-establish the beaver in Pennsylvania as a wild life asset, as well as to improve fishing conditions and conserve the flow of water through the dams built by these animals, a number of colonies are being established, especially at our game preserves where suitable waters are available. A colony started at our preserve near Sizerville, Cameron County, in 1917 where a single pair were released, is thriving nicely and the people of the Commonwealth conversant with this action are very much pleased with our efforts to again add these desirable fur-bearing animals to our fauna.

PRESENCE OF OTTER.

An authentic report reached our office only a few days ago that on Dec. 26th an otter was killed on Hicks Run in Cameron County near our game preserve in that section. The otter while quite plentiful in Pennsylvania in years gone by, in recent years has been practically exterminated because of its valuable fur and is very rare in this part of North America at this time. The killing of one of these animals in Pennsylvania is, therefore, such an unusual occurrence that we thought it advisable to make special note of same.

SONG AND INSECTIVOROUS BIRDS.

Practically all beneficial song and insectivorous birds appear to be increasing splendidly. More people are daily taking an interest in the bird life of Pennsylvania principally because of the value of their lifework. Through educational work we are doing along this line coming generations will contain a goodly percentage of bird conservationists which will in future years beyond question mean much to our people economically.

ASSISTANCE TO OTHER DEPARTMENTS.

Our officers are continuing to render all possible assistance to the Department of Fisheries in the enforcement of the Fish Laws; to the Department of Forestry in extinguishing forest fires; and to the Department of Agriculture in the enforcement of the Dog License Law. Such assistance is not permitted to interfere with the regular work of the Game Protectors, and while no large amount of energy can be devoted to any of these interests by any one officer, taken in the aggregate much benefit is resulting from such help.

STATUS OF FUNDS.

By reference to Financial Statements attached to the report of our Acting Secretary you will note that on December 1st, 1918, we had to our credit in the Game Propagating Fund in the State Treasury from license fees, fines, etc., a total of \$293,451.06. The deposits during the year ending November 30th were \$201,393.86, and the total expenditures from that fund \$250,444.03, leaving a net balance to our credit in the Propagating Fund November 30th, 1919 of \$244,400.89.

In the Bounty Fund on December 1st, 1918, we had a balance of \$265,779.84 in the State Treasury. The deposits to this fund during the year ending November 30th were \$186,909.06, and the total disbursements \$78,365.02, leaving a balance of \$374,323.88 to our credit in the Bounty Fund on November 30th, 1919.

Your special attention is invited to the fact that this office during the past fiscal year collected and paid into the funds set aside for our use a total of \$28,701.06 in penalties and fees for propagating, taxidermists, and other similar licenses. In view of the fact that our officers are each primarily an educational factor in the territory under his control rather than a collector of revenue through penalties, etc., the amount deposited with the funds of the Department during the year is rather surprising.

We feel confident that the work of our Board throughout is in better condition at this time than was heretofore possible. Our field work is properly systematized and more people are constantly coming forward and lending assistance in a manner that is very gratifying. This is largely due to the fact that the sportsmen of the State more and more realize that the work of the Department is entirely for their welfare; that if the best possible results are to be attained they must actively co-operate both individually and collectively with the forces that are endeavoring to improve their pleasure and recreation.

Respectfully submitted,

CHARLES B. PENROSE,
President.

JNO. M. PHILLIPS,
W. B. McCaleb,
H. J. DONALDSON,
J. S. SPEER,
GEO. D. GIDEON,
Board of Game Commissioners.

Attest:

SETH E. GORDON,
Secretary.

Harrisburg, Pa., December 1st, 1919.

To the Members of the Board of Game Commissioners, Commonwealth of Pennsylvania:

Gentlemen: I beg to submit the following Annual Report covering the work of the Department during the past fiscal year, which, because of continual growth and larger field of activities, is of necessity rather voluminous in order that you, as well as the sportsmen of the State and others interested, may obtain a comprehensive knowledge of the results obtained, although I am frank to admit that because of the press of urgent administrative duties so suddenly thrust entirely upon me I am unable to do the work of the Department justice in this report.

OBITUARY.

DR. JOSEPH KALBFUS, NESTOR OF GAME AND WILD BIRD PROTECTION IN PENNSYLVANIA.

Through the tragic and untimely death of our Chief, Dr. Joseph Kalbfus, when the automobile in which he was riding in the active performance of his duties, accompanied by E. W. Kelly, was struck at the Farley Road Crossing near Tiona, Warren County, about noon on Sunday August 10th, 1919, by an eastbound Pennsylvania Railroad express train, the sportsmen of Pennsylvania and the interests of conservation throughout the United States lost a faithful, conscientious leader with a wide range of experience and a fund of knowledge that can never be replaced. Through his death the Commonwealth lost one of the most earnest, conscientious officials ever found in public service and those of us who had the privilege of knowing him best have lost a staunch, loyal friend who was ever ready to lend a helping hand to his fellowmen. I myself shall always consider it an unusual privilege to have been associated with him for a number of years as a co-worker and understudy, so to speak.

Few sportsmen throughout the State know that while Dr. Kalbfus became Secretary to your Board on October 1st, 1895, and in that capacity executive officer of the Department, he did that work without recompense and without clerical or field assistance of any kind for a period of six years before an appropriation was made to pay for the services of a Secretary and that during that period he was compelled to spend a portion of his time at his dental practice to keep himself and family supplied with the necessities of life. Because of this condition he worked at his office late into the night for months at a stretch to properly administer the duties of his office, or spent days of most difficult travel and faced untold dangers in the performance of necessary field work.

Dr. Kalbfus was born April 12, 1852, at Williamsport, Lycoming County, and when a mere boy went to the western frontier, where he spent six eventful years, after which he returned to Pennsylvania,

read law and was admitted to the Carbon County Bar. He then became a revenue officer in the coal region section of the State during the Mollie Maguire days in which service he performed a most hazardous duty with the utmost fidelity. Later he was appointed to a clerkship in the office of the Secretary of the Commonwealth; then studied dentistry and followed that profession exclusively until he took up the work of the Game Commission. His reputation as a conservationist soon spread throughout the Nation and his sound logic and experience frequently came to the assistance of sister States who solicited his advice. During the latter years of his life the rank and file of sportsmen in Pennsylvania were awakening to the importance of the great work he had accomplished for them, and as time goes on the foundational work wrought by Dr. Kalbfus will be more and more appreciated.

E. W. KELLY, SPORTSMAN AND CONSERVATIONIST.

In the passing of E. W. Kelly, (more familiarly known as "Woody" Kelly), of DuBois, who was killed in the same railroad crossing accident, the Commonwealth lost a worthy, upright, conscientious officer who, because of early training and experience was eminently fitted to fill the position of Field Superintendent, having special supervision over the Game Preserves. For years prior to his connection with our force which dated from August 1st, 1913, "Woody" Kelly was known throughout the State as a sportsman of the highest type and a formidable adversary in any sportsmen's contest, especially trap-shooting, or pistol or rifle matches.

Mr. Kelly was always ready to do everything in his power to advance the interests of the sportsmen of Pennsylvania either day or night regardless of hardships or personal welfare and wherever he went in the performance of his duties he found willing hands to assist him. The very presence of "Woody" Kelly in any section of the State where hunters were disposed to be careless relative to the observance of the Game Laws was sufficient in most cases to compel such individuals to put up their guns and respect the law. Oddly enough, too, the majority of the men whom he in the performance of his duties was compelled to prosecute later became some of his staunchest friends. His loss is also an irreparable one deeply mourned by those who knew him.

NEW LEGISLATION—SESSION OF 1919.

For some unknown reason the volume of bills introduced in the 1919 Session of the General Assembly affecting game and wild birds was smaller than usual, although because of the continually growing interest in out-door recreation and sports a number of proposed bills pertaining thereto may be expected to make their appearance at each session of the Legislature. A few new features were added to statutes already on the books, and several desirable new acts were passed, which as a matter of general information I deem it advisable to take up separately, as follows:

PURCHASE OF LANDS FOR GAME PRESERVES.

Since it has been demonstrated that the game sanctuary idea as originated in Pennsylvania is beyond question the most practical method through which various species of game may be perpetuated and increased, it was thought advisable to establish at least one of these sanctuaries or preserves in every county of the State where suitable lands can be obtained for that purpose. It was found, however, that the lands owned by the Commonwealth were located mostly in the central portion of the State and that some other available lands must be secured if this program was to be carried out. The first thought was to lease suitable tracts until some more desirable method would be developed. In the meantime unused revenue from the Resident Hunters' Licenses was accumulating in the State Treasury and those interested thought it would be much better business to purchase lands for game sanctuary purposes, to be retained perpetually for that use, than to expend moneys in leasing suitable tracts and improving game conditions thereon with the possibility that at the expiration of the lease the lands so used might pass out of the control of the Commonwealth. A bill with this end in view was prepared and introduced, which received almost unanimous support from both sportsmen and Members of the Legislature. Under its provisions as passed the Game Commission is authorized to expend not to exceed \$100,000.00 from the License Fund the first year, and not to exceed \$50,000.00 annually thereafter for the purchase of lands in portions of the State where the Commonwealth does not now own suitable lands. The consummation of plans for the purchase of suitable lands already under way I am confident will entirely satisfy the desires of the sportsmen of the State. By purchasing a tract of five to eight thousand acres in each case as proposed, creating on the central portion a preserve covering approximately half of the area, and leaving the balance open to hunting during the open season, sportsmen will have a suitable place to hunt for all time without the annoyance of being confronted with trespass notices.

AUXILIARY PRESERVE ACT.

The Auxiliary Preserve Act of 1917 was found to be inadequate because such preserves were governed by the same law as applied to regular Game Preserves, and lands were not freely offered as contemplated for use as Auxiliary State Game Preserves due to such restrictions. At the instance of sportsmen a bill was drafted giving the Game Commission authority to fix the regulations governing Auxiliary State Game Preserves. This bill was introduced, passed and approved, and I am confident a number of these sanctuaries will be established during the coming year.

INCREASE OF GAME PROTECTORS.

The number of Game Protectors that could be appointed under the last amendment to the organic law creating the Commission was limited to sixty officers, and since the sportsmen throughout the State felt that we should have an officer for every county, with such supervisory officers as might be most conducive to best results, it was

deemed advisable to provide for the appointment of a maximum of eighty Game Protectors, and a bill prepared accordingly was passed and approved. This appointive power covers such employees as may be appointed Game Protectors and detailed to office duty, officers detailed to supervisory positions, and officers in charge of county district. Good results will undoubtedly follow this increase of officers, since we must if possible expend more energy in taking care of our native game instead of depending upon restocking with imported birds and animals.

NEW BOUNTIES AND SYSTEM OF PAYMENT.

The system for the payment of bounties provided for by the Act of 1915 was a very decided improvement, but the delay occasioned through the routine necessary before claimants received settlement for their bounty claims resulted in much dissatisfaction. A new bounty bill was prepared and introduced providing for the payment of all claims direct from our office, which bill prior to its final passage was amended increasing the bounty on the wild cat from six dollars to eight dollars, and on the weasel from one dollar to two dollars. This bill as passed and approved provides a very satisfactory system and I believe is less susceptible to fraud than any system for the payment of bounties in use in America.

CHANGE OF SEASONS.

While a number of bills affecting the game seasons were introduced, but few minor changes were made. The blackbird season was opened one month earlier, on August 1st instead of September 1st; the woodcock season was changed to open October 1st instead of October 20th; and the red squirrel was taken from the list of game animals entirely, thus permitting the killing of these squirrels at any time of the year. The open season as now provided for woodcock removes a heretofore very serious barrier to a synchronous season for small upland game, such as ruffed grouse, ring-neck pheasants, quail, squirrels, rabbits, etc., so much desired by fully eighty-five per cent. of the small game hunters, and if these sportsmen continue their demands for such season the next Legislature will no doubt provide a season for these birds and animals for the month of November only. Many sportsmen in the wild turkey sections of the State believe that the turkey season should also be made for the same period, and if our turkeys continue increasing as they have during the past four years they could no doubt stand a season of this length and everybody would have an equal chance.

KILLING DEER OR ELK BY MISTAKE.

Under our law as it heretofore prevailed the man who actually killed a large game animal by mistake had no incentive other than good sportsmanship to impel him to dress and hang up the carcass and come in and acknowledge the wrong done and pay his penalty. As a result of several cases during the 1918 season considerable sentiment crystallized in favor of returning to a man who made a mistake of this kind a portion of the penalty, and the result was the in-

troduction and passage of an act providing that where a man makes a mistake and kills an illegal deer or elk, not intentionally or carelessly shooting at such animal regardless of its legality, such person may come forward within twenty-four hours and acknowledge the error made, see to it that the carcass is dressed and hung up, make an affidavit giving the details surrounding same, and pay to the Department direct or through officials designated the full penalty. We then have an investigation made and if the statement made is found correct one-fourth of the penalty will be returned. While a number of men who make mistakes will take advantage of this act this season, I am confident that when the provisions of the act become generally known many honest sportsmen will annually take advantage of same to the benefit of themselves as well as the Commonwealth through the recovery of the carcasses of many animals that were heretofore unfit for food when found.

ALIENS TO PRESENT NATURALIZATION PAPERS WHEN APPLYING FOR LICENSES.

Since the passage of the Resident Hunter's License Law in 1913 unnaturalized foreign-born residents were continuously getting into trouble through a belief that if they were issued a license they would be entitled to hunt. To safeguard these people in every way possible as well as to prevent violations of the Alien Firearms Law those interested had introduced an amendment to the Resident Hunter's License Act requiring officials issuing licenses to give certain specified data on the license of all naturalized foreign-born persons. During the present hunting season I am pleased to say but few cases have been reported where aliens secured licenses, indicating that the officials issuing the Hunters' Licenses were making an effort to comply with this Act, to the provisions of which we called their special attention immediately after the licenses were distributed.

MISCELLANEOUS.

Among the bills of lesser importance affecting our work passed by the last Legislature may be mentioned the act denying a division of penalties collected from aliens under either the Alien Dog Law or the Alien Firearms Law, thus taking away the incentive for the persecution rather than the prosecution of these people by unscrupulous persons; the act protecting the skunk and the muskrat and providing an open season from November 16th to the end of February and the act extending protection to foxes in Chester and Montgomery Counties. This office, however, has nothing to do with the enforcement of the latter two acts mentioned, although information relative to same is supplied whenever desired.

Several meritorious bills affecting sportsmen failed of passage, among them being a bill attempting to throw open to the use of the sportsmen of the State all wild, unfenced, unimproved land for the purpose of hunting and fishing, but apparently the import of a bill of this sort was not generally understood and same failed to pass. Organized sportsmen are now taking this matter up in the hope of educating the people of the State to the necessity for legislation along this line in order that the system prevalent in European countries,

viz., only a certain class of the populace permitted to enjoy the pleasures of hunting, shall not further encroach upon the hunting territory of the sportsmen in general in Pennsylvania. One most pernicious custom that has recently become established in certain sections of the State most surely needs serious consideration. I refer to the formation of an organization among large as well as small landowners, posting their lands in the name of the organization against trespass, and then charging men who desire to hunt thereon a fee of one dollar and upwards per day for the privilege. I very much question whether any of the people who have become connected with a movement of this kind have given a single moment of serious thought to the rights of their fellowmen and the fact that the game found on their lands in a wild state belongs to all the people of the State in their collective capacity and not to the individuals who for the time being may own or control those lands. I feel confident the next Legislature will be called upon to give these matters further consideration.

ADMINISTRATION OF FIELD WORK.

The administration of our field work as directed at your meetings in July and October is already securing very desirable results. Through the abolishment of the position of Field Superintendent, which officer attempted to look after the preserve work exclusively, and imposing such duties on the ten Traveling Game Protectors as the supervisory officers in charge of the districts allotted to them, this work is distributed and placed in the hands of an officer nearby who frequently gets in personal touch with the Game Preserve Keepers, ready to render such assistance as necessary, thus securing better results in that direction than heretofore possible.

Through these Traveling Game Protectors we are now able to secure a more uniform enforcement of the law not heretofore obtainable when but one officer was expected to cover the entire State. Each supervisory officer at this time has from five to seven counties to cover and makes a specialty of assisting new and inexperienced officers to get properly started in the work, helping experienced officers in difficult problems whenever needed, etc. This also permits special investigations whenever necessary without leaving a district unprotected as was previously the case, and in addition gives us an opportunity to do an educational work heretofore impossible among the sportsmen, schools, etc., that will mean more for the cause of conservation in future years than anything we might do in the way of enforcing the law at this time. We today have ten persons assisting us to every one person who helped us five or six years ago, and by systematically carrying out our educational work as proposed we can materially increase this ratio in the next two or three years.

Since these supervisory officers have been appointed we have been holding a meeting of these men at Harrisburg each month. Each Traveling Protector examines the reports of the officers in his district and then brings up for discussion and instructions any questions that might be of benefit to all. Such instructions as necessary for the ensuing month are then given, all Traveling Protectors in turn assisting and instructing the Protectors in their respective districts as much as possible prior to the next ensuing meeting, and, as above

stated, this plan of securing uniformity in the work cannot help but materially improve conditions generally, and while insufficient time has elapsed to fully demonstrate the improvement in the work, I am confident that this system is practical and will be entirely satisfactory.

As desired by the sportsmen, every county except three has a Game Protector to look after their interests in that county, and because of the reduced territory now allotted to each Game Protector more efficient work will necessarily follow. In sections where still additional help is needed Special Deputy Game Protectors have been employed for such periods as necessary to assist the Game Protectors in charge of the county districts. The great majority of these Special officers have rendered very excellent assistance so far this season and the sportsmen are well pleased with the good results obtained from this additional help.

I am pleased to report that the sportsmen of the State are beginning to realize more fully than ever that since game of no kind can be secured in large quantities for re-stocking purposes the more protection we can accord our native game birds and animals during the breeding season, as well as at all other times of the year, the better conditions will gradually become and give their entire approval to the employment of such number of officers as may be necessary to control conditions properly.

GAME CONDITIONS.

From reports gathered personally and through our officers I am satisfied game conditions generally are quite favorable, especially when the unusually large number of hunters each year is taken into consideration. Present indications are that between 370,000 and 400,000 Resident Hunters' Licenses and probably 1,000 Non-Resident Hunters' Licenses will be issued this year. There are not less than 200,000 farmers and their children in the State who hunt, without a license, on their own and immediately adjacent lands, making a total army of approximately 600,000 men hunting for game of various kinds this year. Many young men who prior to entering Federal Service were not interested in firearms and hunting have this year taken up this, the greatest of out-door sports, and these added to the coal miners, who hunted extensively while on strike, helped make up this unusually large number of hunters this season. How we can ever hope to maintain a game supply sufficient to meet the demands of such an army of hunters is a quandary to me, unless each of us is willing to look the question squarely in the face and be satisfied with a bag that ten or fifteen years ago would not have been considered at all worth while. I am glad to say the great majority of the sportsmen of Pennsylvania today look upon hunting as a source of pleasure and recreation, and not a source of revenue in dollars and cents as was the case in years gone by.

While an army of men hunted for game of various kinds in Pennsylvania this season, data recently received from many reliable sportsmen in all parts of the State, as well as our officers of long experience, satisfies me that we have more small game of all kinds, such as wild turkeys, grouse, quail, rabbits, squirrels, etc., left over

for breeding purposes than at the close of any season during the past five years. I am making this statement advisedly and conservatively, and if weather conditions during the present winter and coming spring and summer are favorable I look forward to the best hunting season in a decade for game of all kinds in 1920.

DEER.

The rapid increase of these animals in all suitable sections of the State is very gratifying. This increase is especially marked in the vicinity of our Game Preserves and in the counties which were re-stocked and closed for a number of years. Early information reaching me while this report is being written indicates that there are from 60,000 to 75,000 men hunting with rifles or shotguns loaded with bullets in the deer territory of the State. Because of the work of the Department thousands of men will again enjoy deer hunting in territory near their place of residence where only a few years ago these animals were no longer extant; in many cases old firearms almost forgotten because of disuse will be pressed into service and men of advancing years will again be thrilled with the pursuit of the wary buck which in their several communities had long since passed out except in memory, and if the sportsmen in these portions of the Commonwealth where we have again brought back the deer will only be careful to observe the law these animals will continue increasing from year to year. In one county recently stocked the sportsmen felt the season should be closed, but feeling that the game preserve created in that section prior to stocking with deer would supply a haven of refuge and the deer continue increasing under the protection we are now able to accord, such action was discouraged. Knowing that there are not less than twenty legal bucks among the deer released last winter I am rather anxious to learn just how many of these bucks will fall before the fire of the host of riflemen who intend hunting in that section.

Reports relative to damage done to growing crops of various kinds by deer continue to reach us, and I am afraid that ere many years the Legislature must provide some method for reducing the number of female deer or life around the headquarters of your Commission will not be all sunshine. Quite a number of sportsmen recommend placing in the hands of the Game Commission such power as may be necessary to declare a close season on male deer with horns two inches or more above the hair and provide a short season, say a few days, for the killing of female deer in counties where the does become too plentiful. In this manner they argue the ratio of buck to does will be changed very materially in one short season and at the same time make it entirely safe for the sportsmen. Others are disposed to permit the females to die off of old age rather than kill them in this or any other manner regardless of the damage they may do, but this will in many cases impose hardships upon landowners adjacent to deer territory that would be entirely unfair and, therefore, be contrary to the tenets of true sportsmen. I mention this phase of the deer situation in order that the matter may be given careful consideration prior to the next session of the Legislature, at which time I apprehend bills dealing with this question will be introduced at the instance of persons interested.

ELK.

From data collected during the past year I am positive that the elk are increasing nicely in several sections of the State without being likely to annoy landowners for many years to come, while in other portions of the Commonwealth less extensive in area these animals are a constant source of annoyance. If conditions in the meantime do not become unbearable, I am hoping that the killing of legal bulls in 1921 will have a very desirable effect upon the balance of the herd in such instances where they are somewhat out of place.

BEAR.

Authentic reports reaching us as well as investigations on the part of our officers and myself convince me beyond question that these animals are more plentiful in Pennsylvania today than for many years, and numerous complaints relative to damage to livestock and bees have been investigated. In many of these alleged depredations to livestock, especially sheep, by bears, investigation showed that dogs were chiefly responsible, but a number of cases investigated indicate conclusively that bears were the culprits. While the killing of livestock is not a customary trait of black bears it is evident that certain individuals develop a mania to kill livestock, and in Potter County especially a number of farmers have sustained losses while many others have disposed of their entire flock of sheep because they fear inroad from bear. As a result a petition has been presented to the Board asking that the county be opened for a period to the killing of bears except through steel traps and dead-falls.

Because of the dense underbrush in many parts of the bear territory these animals are reasonably secure from extermination by hunters with rifles, and I am confident from the increase made during the past three years that such hunting will not keep the bears in check in many sections of the State. Because of this condition many of our best sportsmen are recommending that the use of pens under restrictions as deemed necessary again be legalized, the thought being that not more than one bear should be taken in one pen during any one season. This question merits careful consideration prior to the meeting of the next Legislature.

RABBITS.

While rabbits were apparently unusually scarce during the season of 1918, the kill so far for 1919 has been very satisfactory in most sections of the State and I am confident we will have many more rabbits left over for breeding purposes than we had last year. There is, however, a continuously growing sentiment in favor of reducing the daily bag limit for rabbits to five or six, also to limit the season to the month of November. It is claimed, and justly so in many cases, that ten rabbits per day is more than the average sportsman desires to kill or can consume in the average family within a reasonable time; that if a smaller bag limit were fixed good rabbit hunting could be had practically all through the season, instead of killing most of the rabbits the first two or three days of the open season as

is now the case. In view of the ever increasing number of hunters in the State, at least eighty-five per cent. of whom are rabbit hunters, I do not hesitate to predict that rabbits would not become super-abundant with a smaller daily bag and a season for November only. Should the rabbits not be killed off closely enough during such season we could make excellent use of the surplus for stocking purposes. In some sections the sportsmen now claim there are sufficient rabbits to permit good hunting throughout a season of two or three months, but the moment one of our representatives begins making arrangements to trap some rabbits in that section for stocking purposes in other parts of the State where badly needed, all kinds of protests reach us forthwith.

Varying hares, commonly known as snow-shoe or jack rabbits, are apparently increasing in those portions of the State where they are usually found, and many sportsmen annually derive a lot of pleasure out of hunting these vari-colored fleet-footed denizens of the forest.

SQUIRRELS.

In many sections of the State these animals were more plentiful this year than for some time past. In a number of cases they destroyed considerable corn and incited numerous complaints relative to the damage they were committing. In sections where we have been stocking fox squirrels these animals are apparently doing very well. Reports reaching me recently indicate that we have a goodly supply of squirrels left over for stocking purposes and with proper feeding in sections where natural food is scarce we should have excellent squirrel hunting next year.

WILD TURKEYS.

We had more wild turkeys when the squirrel season opened this year than found in Pennsylvania for at least twenty-five to thirty years past, and a number of old turkey hunters informed me personally that they were positive we had more turkeys in the better turkey portions of the State than we have had for fifty years. While these latter statements may be somewhat exaggerated, I do know of my own knowledge that the turkeys have increased wonderfully. In many places where we have been stocking wild turkeys I find the birds are becoming established and prospects for turkey hunting in those sections in future years are very encouraging. In some sections the turkeys destroyed considerable buckwheat for nearby farmers and to avoid this as well as supply food we have been paying persons in position to do so for the sowing of buckwheat and other grains to be left for feed for the turkeys and other game birds. We have in this way secured very good results. Unfortunately for the law-abiding sportsmen who enjoy wild turkey hunting some unscrupulous hunters killed a number of these noble game birds during the squirrel season, and while upwards of fifty of these pre-season turkey hunters have been successfully prosecuted and compelled to pay a penalty of \$25.00 each and costs, still many of our best sportsmen are of the opinion that but few more, if any, additional turkeys would be killed if all small game as well as turkeys were to come in November 1st and close November 30th, thus giving everybody an equal chance.

At the time the turkey season was fixed for the last fifteen days of November the turkeys needed this additional protection badly because the season for small game then extended over a period of forty-five days throughout.

RUFFED GROUSE.

The rest of one season given this, the kind of American game birds, was very beneficial in many sections of the State where they had not previously been too closely killed off, but in a number of sections where they had been almost exterminated from over-shooting, etc., no perceptible increase has been noted. From recent reports, however, I am confident that because of weather and food conditions during the first half of the open season the birds were very much scattered, while men who covered the same territory later in the season report finding more birds than on their first trip over the same ground. From reports covering practically every part of the Commonwealth I am satisfied that with a good hatching season next year our grouse will again be sufficiently plentiful to supply good shooting, although in some sections the sportsmen feel the season should again be closed. Whether petitions to this end will be filed I am as yet unable to say, but I have been hoping that this periodical scarcity of grouse will soon have passed so that the birds may be better able to withstand the increased demands upon them because of the continuously growing army of wing-shots, good roads, the use of automobiles, etc.

RING-NECK PHEASANTS.

While these imported birds can never be expected to take the place of the ruffed grouse, commonly called pheasant, still the reports relative to their increase in most sections of the State are quite encouraging, and many men who have heretofore hunted exclusively for grouse now spend their time hunting for ring-necks, thus relieving the drain on the grouse. I am satisfied that the releasing of the mature birds is far preferable to supplying eggs insofar as increasing the number of birds for a given outlay is concerned. I do find, however, that through attempting to hatch and rear the ring-necks we frequently get persons actively interested in the work of the Department that would otherwise take but little or no interest, so that the purchase and distribution of eggs in my opinion is a judicious expenditure of a portion of the sportsmen's funds. In the latter part of this report you will find a tabulated statement covering the results from pheasant eggs this year, and next year we will be in position to give more complete data on this subject, as blanks have been prepared upon which to collect same so we can tell definitely during what period after hatching most of the chicks are lost, etc. From data now in hand it is evident that most of the losses occur during the first and second weeks after hatching. One of the men who reared the largest percentage of birds hatched took the eggs out of a guinea hen's nest and substituted the ring-neck eggs, leaving the guinea fowl rear the birds just as guineas are usually reared, with excellent results. Persons attempting to hatch eggs in incubators have not met with any worthwhile degree of success.

QUAIL.

In a number of sections more Bob-white quail were reported this year than for some years past, but so many farmers prohibit the killing of these birds that the number killed during the open season will run approximately the same as heretofore. In other portions of the State the birds have not increased perceptively, although the few birds secured from Mexico last spring did very well. We were unable to give the new quail traps a proper test last winter, but if present weather conditions continue we hope to try these traps thoroughly this winter so that the coveys may be trapped and cared for as well as broken up in pairs at the proper time.

In those sections where farmers prohibit quail hunting it would be to their interest as well as to the interest of the sportsmen of the State to trap and separate and coveys even though many of the birds would be placed on surrounding lands. In this manner many coveys of birds would be produced and from an economic standpoint accomplish much more than by leaving the original covey intact. The great trouble is that the owners of the lands in many cases do not understand and are afraid someone is merely desirous of destroying their feathered friends. We are doing what we can to have landowners see this matter in its proper light.

The Hungarian quail seem to be increasing slowly in several sections where they have gotten a start, and rather encouraging reports are received from time to time relative to the increase of the Gambel Quail. What the ultimate result of these experiments may be remains to be seen, but the sportsmen in the sections where these birds are found are quite enthusiastic and are doing their best to give them a proper chance.

WILD WATER-FOWL.

Stream conditions were more favorable in Pennsylvania this fall than for several years past, and many sportsmen enjoyed excellent shooting. These birds are apparently increasing under the Federal law and the sportsmen generally seem quite well satisfied with the results being secured.

WOODCOCK.

In a number of sections of the State, probably because of the earlier season, woodcock shooting was somewhat better than heretofore, although the number of birds is usually too limited to afford good shooting. The sportsmen generally throughout the State I believe would be pleased to see the Federal authorities accord these birds a closed season of about five years throughout the United States, and it has been hoped this would be done. It would be useless for one or two states to close to these birds with only flight shooting and then have the birds thus saved killed off while passing through States farther south.

BLACKBIRDS AND REED-BIRDS.

Under the earlier season provided for blackbirds many more of these birds were killed than any time for a number of years past; these birds apparently being present in considerably larger numbers

than heretofore, and I am convinced that the judgment of the Legislature in providing an earlier season was most satisfactory not only to sportsmen but to persons who during previous years sustained considerable damage to corn, oats, etc.

Through a ruling of the Secretary of the Department of Agriculture, Washington, the sportsmen of Pennsylvania and adjacent States again enjoyed reed-bird shooting. The action taken in this matter has done much to restore among sportsmen confidence in the Federal authorities having to do with game and wild birds, especially in the southeastern portion of the State, where most of the reed-bird shooting occurs.

ISSUANCE OF HUNTERS' LICENSES.

Immediately after the close of the season of 1918 when we found that the number of Resident Hunters' Licenses issued was 311,290 and the issuance of Non-Resident Hunters' Licenses was 478 with the season closed to grouse and thousands of our young men in the federal service, we concluded to order and distribute 25,000 more licenses and tags than in any previous year, or approximately 350,000 Resident Hunters' Licenses, with such number of Non-Resident Hunters' Licenses as necessary, the latter being issued from a continuous supply while the former are printed specifically for each year. The demand for licenses and tags far exceeded our most sanguine estimates and County Treasurers soon began placing orders for so many additional licenses and tags that the supply of extra tag material was quickly exhausted and an additional supply unobtainable in sufficient time to be of use this year. After the tag material was used up the licenses were printed and distributed without tags and the sportsmen asked to make their own tags from such material as might be available, and I want to commend most highly the manner in which the sportsmen of the State assisted us by complying with our request.

Present indications are that between 370,000 and 400,000 Resident Hunters' Licenses were issued, with probably 1,000 to 1,200 Non-Resident Hunters' Licenses. It is conservatively estimated that there are 200,000 men in the State hunting annually without licenses on the land whereon they reside and cultivate and immediately adjacent lands, and this number added to the licensed sportsmen comprises an army of approximately 600,000 men hunting for game in Pennsylvania this year. How it is possible for game of any kind to survive, let alone increase, is a wonder to me. I fear that some of the men who cannot understand why game of various kinds is not more plentiful do not stop to think that it is entirely unfair to compare present conditions with conditions that prevailed twenty-five or more years ago when probably not more than 75,000 men in the State hunted regularly and a great deal of primitive game cover still remained; when improved firearms and ammunition of the present day type were unknown; when improved highways and automobiles were not everywhere present to carry men to and from the best game covers of the State; and before present day methods of developing hundreds of wing-shots through trap-shooting organizations everywhere over the State.

This unusually large issuance of licenses in Pennsylvania this year is directly attributable to improved game conditions generally and to the return of our boys from federal service who had been in the habit of hunting as well as hundreds of young men who during federal service for the first time became interested in the use of firearms. In addition to these, the ever-growing trend to out-door sports, the coal strike in the bituminous regions of the State, etc., added materially to the number of hunters, and I feel confident that as the work of the Department is brought more and more prominently before the people of the State and game conditions are gradually improved, the number of licenses to hunt in Pennsylvania will likewise increase.

In order to avoid delays in having additional licenses printed for such counties as may exhaust their original quota, I propose issuing a goodly supply to each County Treasurer for 1920, and then have printed in consecutive numerical order an additional number of thousands to be held at the office in Harrisburg and sent out quickly to such counties as may need same. This extra issuance of license tags will not bear a county number, but will instead bear the words "Special Issue" and the numbers sent each county necessary will be properly recorded in the office at Harrisburg for reference at any future time.

In the addendum to this report we hope to give figures on the licenses issued this year.

HUNTING ACCIDENTS.

I regret to say that from early reports reaching us it is apparent that the number of hunting accidents, both fatal and non-fatal, will run considerably higher this year than heretofore. It is of course to be expected that because of the larger number of hunters there will likely be more accidents, but early reports indicate an unusually high percentage this season. The only way I can account for this condition is because more inexperienced boys and men are hunting than ever before. See addendum for final figures.

In this connection I would say that many sportsmen throughout the Commonwealth agree absolutely with the provisions of a bill introduced in the 1915 Session of the Legislature by Hon. J. G. Dell of Huntingdon County providing that whenever a man kills another in mistake for game he should be indictable for manslaughter and prosecuted accordingly, and I am of the opinion that an act of this sort if given plenty of publicity would mean much to the sportsmen of the State, as there is positively no excuse for any man to shoot another in mistake for game of any kind if reasonable care is exercised.

GAME PRESERVES.

The Pennsylvania Game Preserve system continues finding favor wherever the plan is presented, while other States are gradually taking up this method of increasing their native game supply rather than depending upon game farms. Up to this time the only worth while results have been attained with the ring-neck pheasants, which, from the true sportsman's viewpoint, cannot be compared with any of our native game birds. In the territory surrounding each of our Game Preserves game conditions are gradually improving, this being es-

pecially true relative to deer, wild turkeys, ruffed grouse, squirrels, etc., the increase in many cases being so phenomenal that persons who have not actually examined into conditions are inclined to doubt the statements made relative thereto. On various occasions when addressing sportsmen I have referred to the increase of deer surrounding the Mont Alto Game Preserve, and I have told my audiences that in the fall of 1906 but four deer of both sexes and all ages were killed in that territory, that during the summer of 1907 the preserve was created and stocked during the following winter with twenty-five deer, twenty-two does and three bucks, that each year since 1915 the kill of legal male deer in that surrounding territory has been approximately 250 bucks, and that this season will undoubtedly be about 300 to 325 legal deer. I have noticed sportsmen assume a nonchalant air indicative of "you must show me." Just as the deer have increased at this preserve, so they are increasing at practically every preserve in the State.

During the past year no new sanctuaries of the regular type were created, largely because of difficulties experienced in securing proper lands under conditions that would justify such action. In the western part of the State we have been experiencing practically everything of an adverse nature imaginable and since there were no State forest lands worth while the only hope of getting preserves in that section seemed to lie in either renting or purchasing the necessary lands. When the bill authorizing the Game Commission to purchase suitable lands out of the Resident Hunters' License Fund to be set aside and used perpetually for Game Preserves was introduced the sportsmen of the State at once got behind the proposition and the bill went through the Legislature without opposition. Since that time considerable trouble has been experienced in locating the various owners of lands that would be suitable for our purpose, or if located it has frequently taken many weeks for them to decide upon a price for their holdings. Some of them first want to test for oil or gas or minerals, so that getting suitable tracts rounded up for purchase has proved to be a slow proposition. The death of our Chief, Dr. Kalbfus, who at that very time was going over suitable lands to be purchased for this purpose, has also considerably delayed matters along this line, but indications now are that two or three suitable tracts can be closed up definitely in the near future and several of the tracts now under lease can be purchased outright at nominal figures.

With the twenty-four regular preserves we now have and the additional sanctuaries that can I believe be established in portions of the Commonwealth where suitable lands are available I see no reason why we should not during the coming year increase our sanctuaries to a total of forty.

In addition to these regular game preserves each in charge of an officer we now have six Auxiliary State Game Preserves, which tracts vary in size from five hundred acres to two thousand acres, and frequently include agricultural as well as brush and forest lands. These smaller sanctuaries are especially adapted to preserve and increase small game of all kinds and if advantageously placed I am sure will very materially assist in solving the question of perpetuating and increasing the ruffed grouse, wild turkey, etc. in the portions of the Commonwealth where situated. Under the new Auxiliary State

Game Preserve law the creation of these sanctuaries is more flexible and I am confident many more of these tracts will be offered for the use of the Commission for periods of ten to twenty years.

FEEDING OF GAME.

While last winter very little feeding of any kind was necessary due to the lack of snow, in anticipation of more severe winter weather all officers were some time ago instructed to get in touch with sportsmen throughout their respective territories and make arrangements to have game of all kinds fed whenever necessary, also to make a special effort to trap a number of covoys of quail in the new traps supplied last year in order that the birds may be cared for during the winter time and properly paired off next spring. Wherever necessary the assistance of Special Deputy Game Protectors under pay at a reasonable rate will be secured as heretofore to help cover the respective counties thoroughly, and in the portions of the State where there are goodly numbers of wild turkeys considerable special assistance will be employed, so that nothing may be left undone in the way of supplying food wherever possible. The sportsmen throughout the State have in the past rendered splendid assistance in the feeding of game of all kinds, and I am sure will do their utmost during the present winter if necessary. While most species of game birds and animals can survive a most severe winter fairly well without feed, still if supplied food they will come through in better condition and produce more young with far more stamina than would otherwise be possible, so that the feeding of game birds and animals will at all times be a profitable expenditure of time, energy and money.

BOUNTIES.

The people throughout the Commonwealth interested in bounties are very much pleased with the new system for the payment of bounties and the increase in the bounties for the weasel and the wild cat is without question causing people to take more interest in killing these game destroyers than heretofore. There has always been room for doubt as to whether or not the reward or bounty was any additional inducement over and above the inborn desire of all hunters and farmers to kill game and poultry destroyers, or whether many of the animals classed as vermin would not be caught in traps set for the purpose of securing furs regardless of the bounty offered. To a certain degree both these positions are correct and the offering of a reward does not cause the destruction of any additional animals in many such cases, but on the other hand I am thoroughly convinced that the bounty is an incentive to put forth a special effort to catch animals on which a bounty is offered. Only recently I personally accompanied a man around his trap line where traps had been set almost exclusively for wild cat, and whenever this trapper found a weasel was working on his bait he also judiciously placed a weasel trap and in this way annually catches many weasels that the average trapper would not bother about were it not for the bounty.

In some portions of the State I find trappers dislike that feature of the new bounty law compelling the sending of all skins to Harrisburg for examination at the time the affidavit is sent, but when it is

explained that this was done to safeguard their interests and to keep unscrupulous individuals from stealing their money through false claims they are entirely satisfied. All valuable furs are returned by insured mail, and the same identical skins we receive are returned in each case to the claimant, and I believe that after a time this dissatisfaction will be entirely overcome. At any rate, the prompt payment of claims under the present system from our office and the increase in certain bounties will far overbalance the inconvenience of sending skins to Harrisburg. The amount now being paid out in bounties daily varies from four hundred dollars to seven hundred dollars and extra help is necessary to handle the large volume of work until the rush season is over the latter part of March. From time to time we still have men who try to collect bounty money fraudulently. All claims that appear unreasonable are promptly investigated by a capable officer and then finally disposed of after receiving a complete report in each such case. If attempts are made to collect money fraudulently prosecutions follow forthwith, there having been about six such cases during the past year which were successfully prosecuted to a satisfactory conclusion. Only several days ago we received the skins of four grey squirrels with the flesh side out, the hair on the tails clipped and blackened with either stove or shoe polish, and the edges of the fur blackened or smudged, which the man in his affidavit swore were weasels and that they had been killed on certain specifically named dates, which dates happened to be prior to the opening of the season for squirrels. This case is being investigated and prosecution will follow promptly. We are also receiving almost daily one or more "wild cats" belonging to the various breeds familiarly known as Maltese, Angoras, etc., which in the great majority of cases I believe are sent us in good faith by persons, ignorant of the species necessary to secure the bounty. While hunting they find these animals in the forests far from any place of habitation and take it for granted they are wild cats or else they would not be in that place. No prosecutions have in the past been brought in such claims as those killing such animals have been doing God's service for the sportsmen and should be encouraged rather than discouraged.

In the latter part of this report you will find a detailed statement of the bounty claims from each county during the past fiscal year, also a statement showing the claims passed by months which will show the months during which our force in the Bounty Division is compelled to work both early and late to keep up with the rush at that time.

USE OF POISON IN DESTROYING VERMIN.

This method of destroying vermin of various kinds has not been extensively employed and has been used mostly in the game sanctuaries of the State. When used elsewhere it has been placed with extreme care well back from habitation so that dogs or other domestic animals in their proper place would not be destroyed, and then it has been placed in dens, hollow logs, etc., in a vehicle that will decompose quickly unless taken. No poison of any kind except strychnine is permitted, which from numerous experiments does not injure such game birds as might find and eat same.

The use of poisoned corn for the destruction of surplus crows by our representatives has proved most satisfactory with no injurious results to beneficial birds of any kind.

A number of complaints have reached the office during the past year about what was purported to be the improper and outrageous use of poison on the part of our representatives. Each of these complaints has been investigated and in no case was such careless or improper use of poison properly chargeable to employees of the Department. I am satisfied that instead individuals who desired to reflect upon the work of the Game Commission saw to it that these outrages were committed causing the killing of valuable dogs, etc., and that the responsibility was placed upon our officer in that district. In other cases I am confident that the antipathy to certain hunting dogs in various sections of the Commonwealth caused individuals of low repute to place poison for the specific purpose of destroying such dogs. In some parts of the State deer hunters have killed every dog that came into their deer hunting territory, while in other places the feeling against bird dogs makes it unwise to take such dogs into those sections. In still other cases, and probably in a great majority of instances where dogs were killed in large numbers persons interested in sheep took such steps as in their judgment were necessary to protect their flocks, and while all of these practices deserve most severe condemnation and were violations of a general statute prohibiting the placing of poison outside of buildings, still it is absolutely unfair to charge such misdeeds to our employees. A number of complaints relative to the destruction of game of various kinds through strychnine have been carefully investigated without any foundation in truth except where in several cases dead opossums were found. In one instance a raccoon badly decomposed was found and apparently had died from other causes, but in no instance have we been able to find trace of a single wild turkey, or ruffed grouse, or deer, or squirrel, or rabbit killed through the use of strychnine placed for vermin by representatives of the Department.

It is my intention to follow up closely all complaints of this sort as rapidly as they reach us so as to place beyond question the responsibility where it belongs; at any rate to satisfy myself that our officers are not improperly using material of this kind in the destruction of vermin.

PURCHASE OF GAME.

The purchase of game of any kind suitable to Pennsylvania in quantity has always been a difficult matter, and this has been especially true recently. This condition was largely due to war conditions, scarcity of desirable supplies, etc., but a number of other States that during the past two or three years secured revenue through licenses, appropriations, etc., for this purpose are withholding permission to make shipments out of their State. This has been true in several cases where we had placed orders for ring-neck pheasants and the shippers were later compelled to sell to their own State game authorities. We have a contract for approximately 150 Michigan white-tailed deer to be used in stocking preserves not yet supplied and have already secured about 6,000 ring-neck pheasants to be released next spring, this being less than half the number contracted for.

Rabbits of the cotton-tailed variety are difficult to secure at prices within our reach because of the enormous prices received for dead rabbits for food purposes, although quite a number have been contracted for, and a Maine shipper believes he can supply upwards of two thousand Varying Hares, or snowshoe rabbits. Time alone will tell what will result from these orders.

Approximately one hundred and seventy-five (175) wild turkeys have been secured and distributed and if weather conditions permit we have arrangements made for trapping from one to two hundred of these birds out of large flocks left over in the turkey sections of the State and distributing them to places suitable for turkeys. Far better results will be secured in this way and at less expense.

The securing of Bob-white quail from Mexico, the only place where they are obtainable at all, is quite a problem. Last winter the Federal authorities upon our recommendation that no birds be shipped from the border until after February 15th made the importation regulations so stringent that the shippers could not even bring the birds over the border until February 15th, with the result that only 1,500 birds were received out of orders for 35,000 birds. Two of the shippers reported that the drought in Mexico had driven the birds inland where because of internal troubles they were unable to secure them. This season we again placed large orders for delivery after February 15th, but the Washington authorities contrary to our expectations opened the importation and shipping season December 1st, whereupon the shippers advised that if we wanted birds we must take them as they come through quarantine. In order to get birds it was simply a case of letting them make shipments and if the birds get along all right permit them to continue; if not, suspend shipments until weather conditions are favorable. Up to the time this portion of the report is written approximately 2,000 birds have been shipped. These birds practically all reached us in first class condition, the losses incurred during transit being negligible, but in one lot received the birds began dying rapidly a few days after arrival and the Washington authorities have suspended shipments until a proper investigation can be made because some of the specimens sent them were claimed to have quail disease. Recent reports from officers receiving consignments of these same quail indicate that their birds are getting along nicely, some of them not having lost a bird, so that my former opinion relative to this quail disease, namely, that it is invariably nothing but improper handling that develops this trouble, is still my thought on the matter. I firmly believe that this one consignment in which heavy mortality occurred immediately after arrival was grossly misused by the express company, that the birds were subjected to extreme heat and then extreme cold in rapid succession, which treatment is sufficient to kill any living creature, especially quail. What the outcome of our plans in this direction may be I am as yet unable to say. All the birds received are being retained in captivity until springtime, so that no harm can possibly come to our native birds even though quail disease in a virulent form should develop among more of the consignments, which I do not anticipate.

RE-STOCKING OF BEAVER.

Your directions to secure sufficient beaver if possible to start a colony at each Game Preserve where suitable waters and proper food are available is meeting with entire approval among not only sportsmen but fishermen as well as the people of the State in general.

In the course of some investigations I made on a recent trip into the northern part of the State I made a special effort to include in my itinerary a stop at the preserve near Sizerville, Cameron County, where in 1917 through the courtesy of the State of Wisconsin a single pair of young beaver were released on East Cowley Run just alongside the preserve. I find that these animals were well placed on a stream where water conditions are ideal throughout the year and where plenty of desirable food is easily available. Up to this time they have been working almost exclusively on quaking aspen, but have also cut some birch, etc.

The pool or dam where the original animals in this colony were released was made their temporary home until they had time to build a suitable dam about one-half mile down the stream. At this point a large dam has been constructed with a rather commodious house from outside appearance near the middle where an elevation afforded a suitable place for its construction. The breast of the main dam at this point will measure approximately 175 feet by including its various curvatures and meanderings and in addition there are a number of small auxiliary dams for use in floating in food, building materials, etc.

While examining conditions in the vicinity of the permanent dam constructed Preserve Keeper Nelson informed me that about a mile down the stream there had been some work on a new dam this fall but that he had been keeping people away from the beaver workings as much as possible so the animals would not be disturbed and had himself refrained from going near. The weather had been very cold for a few days prior to my visit and it so happened that the very next day a special officer who was assisting us control conditions in that section came down an old tramroad on the opposite side of the hollow from the preserve line near the middle of the day while the sun was shining brightly and had the good fortune to see five young beavers feeding and sporting about in the water at the new dam mentioned. At a safe distance I later made an investigation and found on one side of the main dam an excellent winter home and a number of auxiliary dams in additions to the main dam, so that this colony is thriving nicely.

Since the people in that part of the State have learned about the colony of beaver established at that sanctuary Mr. Nelson has not lacked visitors, especially during the summertime; as there have been hundreds of people there to see the results of this restocking and are carrying back glowing reports of the work of the Commission. The interest manifested has caused the Keeper to wish for more beaver rather than deer, which latter animals have not yet been stocked at that place in such numbers as we desire.

One hundred beaver have been ordered from the Dominion of Canada, only four pairs of which could be delivered this fall due to weather conditions, but we are assured that the balance of the con-

tract will be filled this coming spring. Six of the animals received have been released on the Hickory Run Preserve in Carbon County and the other two were released on a stream along the eastern side of our Jamison City Preserve in Sullivan County, two additional pairs to be shipped to the latter place to fill the allotment for that preserve. In addition to the beaver ordered from Canada several western States have kindly granted us permission to secure a limited number without charge provided we can make satisfactory arrangements to have the animals trapped. Up to this time we have been unable to make such arrangements, although as soon as the weather opens up next spring I am hoping to conclude contracts for the trapping of some of these animals.

Restocking with beaver will again restore a desirable wild life asset to the fauna of Pennsylvania that will merit the approval of the people of the Commonwealth in general. Through the construction of their dams excellent breeding places for trout are supplied, thus improving fishing conditions materially since the beaver is a vegetable feeder and not detrimental to trout. These dams will also help to conserve the flow of water so badly needed throughout the Commonwealth. Under the present law the killing of a beaver is punishable by a penalty of \$100.00 and under the protection we are able to accord these animals as well as the protection they will undoubtedly receive through public sentiment they will rapidly increase and in due course of time the Legislature will no doubt provide proper legislation permitting the trapping of a fixed number annually under a special license.

RECEIPT FOR GAME FOR STOCKING PURPOSES.

Complaints that individuals have from time to time received game from our limited supply distributed through Game Protectors with the specific understanding that the lands on which such game is placed shall either be open to hunting for that game by all legitimate sportsmen or else entirely closed, and later posted their lands to trespassing and hunted for such game themselves or permitted their special friends to hunt for same to the exclusion of other legitimate sportsmen have reached us at various times. It is needless to say that men who will secure game purchased from the sportsmen's money and apply same to their personal use cannot properly be classed as sportsmen. However, when confronted with this question there is usually a flat denial of any such specific understanding with the officer through whom the game was secured, and in order to avoid misunderstanding of this sort in the future a form of receipt has been prepared and supplied to all Game Protectors which must be filled out and signed before game of any sort will be supplied. This receipt contains the specific stipulation that the lands will be either open to hunting for such game by all legitimate sportsmen or else entirely closed for a term after which hunting will be permitted. This signed receipt must be filed with the distribution report covering each species of game and if necessary will be produced to prove to their fellows the type of sportsmen such individuals actually are.

SONG AND INSECTIVOROUS BIRDS.

More people are constantly taking an interest in the song and insectivorous birds of the State and seeing to it that they are protected at all times, fed when necessary, supplied with nesting boxes, etc., in order to not only make life more comfortable for our little feathered friends but to give them an opportunity to perform the utmost service possible to humanity. Data collected during the past year convinces me that we have more beneficial birds with us each year, and while we are called upon from time to time to prosecute persons killing birds, the law relative to this question on the whole is being obeyed splendidly.

The special educational work relative to the value of the lifework of birds carried on in the schools of the State is producing a generation of bird conservationists that will surely bear fruit in years to come. We are now preparing to accomplish as much of this educational work as possible through our entire field organization as well as to encourage teachers, civic bodies, Boy Scout organizations, sportsmen's organizations, bird clubs, Audubon societies, etc., to do their utmost in bringing this subject forcibly to the attention of the school children of the Commonwealth in any manner they may be reached. In communities where this work has been carried on systematically for a number of years it is as unsafe to openly kill a beneficial bird as it is to kill a highly prized pet dog. In either case the little folks would make it mightily unpleasant for the perpetrator. The bird boxes and fruit and berry trees planted for the birds in many communities bear mute evidence of the interest our men and women of tomorrow are taking in this work.

ENFORCEMENT OF FISH LAW.

During the past year our officers have assisted the Department of Fisheries in the enforcement of the Fish Law wherever such action did not interfere materially with their work as Game Protectors. Our work along this line is appreciated by the Commissioner of Fisheries and the law-abiding fishermen of the State, and the sportsmen give their entire approval to our action in this direction. By so doing we are also creating a wholesome respect for the Game Law and frequently breaking up practices that would lead to similar violations under that law.

In pursuance to your action at the July meeting data has been collected on the various nursery streams in the immediate vicinity of our Game Preserves and will in the near future be supplied to the Commissioner of Fisheries in order that steps may be taken to close to fishing such waters as may properly be classed as nursery waters only. The Commissioner of Fisheries is pleased to have this co-operation and has not previously taken steps to close such nursery waters because of lack of necessary field assistance to post and guard the streams so closed. This difficulty will be overcome by having the Preserve Keepers look after these matters.

FOREST FIRES.

While all of our salaried field officers are regularly appointed Fire Wardens so they will have power to call help to their assistance

in case of a forest fire, this power was rarely needed during the past year as we fortunately had but few forest fires to contend with in comparison to former years. The educational work of the Department of Forestry, in which we are assisting wherever possible, has been securing excellent results. Weather conditions were not favorable to fires during the worst period both last spring and this fall, which helped very materially.

ENFORCEMENT OF DOG LICENSE LAW.

At the request of the Secretary of Agriculture our officers throughout the State rendered special assistance in securing a proper observance of the dog license law. The majority of our efforts were directed in assisting to secure action upon the part of County Commissioners, constables, and other police officers rather than assume the burden of the actual enforcement of the law, although in many cases our officers under the special direction of the Secretary of Agriculture secured the necessary evidence and became the prosecutors in order to set an example and have the people understand that this law must be obeyed. I am glad to say also that in those portions of the State where this dog license law was most strictly enforced we had a very marked increase of rabbits this year so that our co-operation in this direction has been beneficial to the game interests of the State as well as the agricultural and stock-raising interests.

MISCELLANEOUS.

Taking the work of the Department in general since the time the first funds secured through the Resident Hunters' License Act became available to our use on June 1st, 1915, I am confident all fair-minded sportsmen will agree we have made very decided progress and that we at this time have that work in far better condition than ever before possible. If favorable comments from sportsmen residing in other States are to be taken as a criterion, as well as the ever increasing number of Non-Resident Hunters' Licenses issued, Pennsylvania holds an enviable position today in her wild life conservation work.

Our monthly prosecution report is meeting with entire approval among the sportsmen of the State and our mailing list to those interested is constantly growing. We are from time to time importuned to place more monthly publications on the work of the Department before the public, many sportsmen feeling that we should have a Departmental magazine or bulletin published and distributed monthly either from funds now available to our use for general educational work or else establish such magazine and place it on a self-sustaining basis through a small subscription merely sufficient to bear the actual cost of paper, printing and postage. The latter method would permit the sale of advertising space to reliable business firms which if necessary would also assist in defraying expenses. Other States that have tried this method are securing excellent support in their efforts along this line and I am confident we in Pennsylvania could produce very gratifying results in this manner. I present this for such consideration as you may deem advisable at this time.

On the following pages you will find statements relative bounties paid during the past year, hatching of ring-neck pheasant eggs, expenditures for both the Game Fund and the Bounty Fund during the year and balances on hand November 30th, as well as a quarterly statement of receipts and expenditures.

Prior to the date of your meeting I will also have prepared proper data relative to game killed, hunting accidents, licenses issued, etc., which may be attached and published in the form of an addendum.

STATEMENT COVERING GAME OF VARIOUS KINDS PURCHASED AND RELEASED, GAME SECURED AND HELD FOR LIBERATION SPRING OF 1920, AND GAME CONTRACTED FOR, BETWEEN DECEMBER 1, 1918, AND NOVEMBER 30, 1919.

GAME RELEASED: (In addition to game held per 1918 Report).	
Deer,	168
Wild Turkeys,	109
Ring-neck Pheasants,	3,029
Ring-neck Pheasant eggs (See detailed report below),	14,663
Rabbits (Cotton-tail),	129
Varying hares (Snow-shoe rabbits),	64
Quail, Bob-white,	1,470
Quail, Gambel,	186
Beaver,	8
GAME PURCHASED AND DELIVERED: (Held for liberation this coming Spring).	
Ring-neck Pheasants,	2,973
GAME PURCHASED OR CONTRACTED FOR TO BE DELIVERED: (Prior to July 1, 1920).	
Deer,	150
Wild Turkeys,	63
Ring-neck Pheasants,	3,716
Rabbits,	2,540
Varying hares,	1,000
Quail, Bob-white,	35,000
Quail, Gambel,	1,200
Fox Squirrels,	400
Beaver,	92
GAME ORDERED FOR RELEASING SPRING OF 1921.	
Ring-neck Pheasants,	2,000

DATA COVERING THE HATCHING AND REARING OF RING-NECK PHEASANTS, FROM EGGS SECURED SPRING OF 1919.

Game Protector.	Address.	No. eggs.	No. hatched.	No. birds released.
James H. Carpenter, -----	Chester, Box 342, -----	310	138	97
Warren Fretz, -----	Doylestown, -----	350	157	70
J. S. Reinert, -----	Box 191, Lansdale, -----	350	302	219
Norman M. Wood, -----	Box 553, Coatesville, -----	350	159	56
Samuel A. Keene, -----	Christiana, -----	350	175	55
Chas. F. Fenstermaker, -----	Reading, 239 N. 11th, -----	350	151	37
James D. Geary, -----	Slatington, -----	200	108	53
Rush H. Bitters, -----	Easton, 627 Ferry St., -----	150	93	52
Wm. H. Merring, -----	East Stroudsburg, -----	200	95	27
Sidney N. Brink, -----	Hawley, -----	150	66	26
Warren F. Simrell, -----	Hallstead, -----	250	152	82
William Anneman, -----	Scranton, 1243 S. Main, -----	350	95	47
H. Bennett Hale, -----	Dallas, -----	350	53	15
James L. Boyle, -----	Mauch Chunk, -----	272	161	83
Albert F. Hartwig, -----	Tamaqua, -----	400	222	87
Wm. L. Ibach, -----	Newmanstown, -----	250	125	27
Peter E. Vale, -----	York, -----	350	256	169
Jas. B. Lightner, -----	Harrisburg, 619 Peffer, -----	300	53	26
Chas. D. Madenfort, -----	Shamokin, -----	300	139	95
Harry W. Miller, -----	R. F. D. No. 3, Bloomsburg, -----	150	129	74
Fred L. VanOrman, -----	LeRaysville, -----	454	101	58
L. G. Hoyt, -----	Tioga, -----	164	78	33
Joseph Smith, -----	Muncy, -----	260	100	No data
Chas. L. Braucher, -----	Hartleton, -----	250	152	58
John J. Slautterback, -----	Lewistown, 214 Logan, -----	300	176	71
S. Maurice Shuler, -----	Liverpool, -----	250	140	51
Warren W. Zell, -----	Carlisle, -----	309	149	41
Guy R. Linn, -----	Cashtown, -----	250	196	66
Ray O. Dunkle, -----	Dry Run, -----	400	233	82
John W. Bumgardner, -----	Trough Creek, -----	200	37	27
Charley Batcheler, -----	Phillipsburg, -----	200	82	82
Grant Stout, -----	Renovo, -----	200	109	25
Wm. F. Hamilton, -----	Gaileton, -----	150	89	0
Wilbur F. Dale, -----	Madera, -----	150	105	15
Lem C. Ale, -----	Bellwood, -----	300	204	115
Eli Ritchey, -----	Everett, -----	150	76	7
Harvy E. Bittner, -----	Meyersdale, -----	300	145	105
K. B. Rodgers, -----	Johnstown, -----	300	177	139
Ido M. Lewis, -----	Marchand, -----	250	125	27
Henry Hilton, -----	Punxsutawney, -----	250	158	102
E. W. Turley, -----	Weedville, -----	150	79	11
L. K. Hogarth, -----	Smethport, -----	149	88	16
Elmer L. Pilling, -----	Garland, Box 248, -----	200	93	26
Charles F. Emick, -----	Tionesta, -----	150	71	42
H. N. Fenstermaker, -----	Clarion, -----	201	99	33
Daniel M. Slagle, -----	New Bethlehem, -----	150	47	29
H. R. Armbrust, Jr., -----	R. F. D. No. 6, Greensburg, -----	302	129	66
C. R. Williams, -----	Fairchance, -----	302	123	88
Jos. P. Kennedy, -----	Monongahela, -----	300	61	19
James Sutton, Jr., -----	Pittsburgh, 3356 5th Ave., -----	350	164	84
R. L. Seager, -----	Ambridge, -----	250	83	23
Joseph M. Curtis, -----	Butler, -----	300	113	76
Henry J. Sines, -----	New Castle, -----	150	64	42
Wm. J. Dickson, -----	Greenville, -----	200	No data	No data
Herbert L. Beatty, -----	Franklin, -----	250	85	38
J. H. Redmond, -----	Meadville, -----	250	146	92
Alex. A. McDonald, -----	Erie, 324 E. 6th, -----	250	144	66
Totals, -----		14,663	7,103	3,250

Cost of 14,663 ring-neck pheasant eggs, ----- \$3,035 50
Cost of expressage on pheasant eggs, ----- 70 54

Approximate cost of each bird reared and released, ----- \$3,106 04
\$0 96

VERMIN KILLED BY GAME PRESERVE KEEPERS IN PRESERVES AND SURROUNDING TERRITORY
DURING YEAR DEC. 1, 1918, TO NOV. 30, 1919, INC.

Preserve number.	Preserve Keeper.	Address.	Wildcats.	Grey foxes.	Red foxes.	Weasels.	Minks.	Skunks.	House cats.	Owls.	Hawks.	Hawks' nests.	Crows.	Crows' nests.
1	John B. Ross,	Renovo,	6	2	3	4	0	5	3	4	15	0	0	0
2	H. E. Selfridge,	Anderson Creek,	0	0	0	12	1	4	3	0	5	0	13	0
3	Seward Staley,	So. Mountain,	0	7	0	1	0	30	5	2	3	0	2	4
4	John W. Fenton,	New Germantown,	1	6	0	0	0	5	0	2	5	0	4	0
5	Norman W. Shawley,	Rector,	1	3	6	7	5	7	0	0	0	2	15	2
6	Harry J. Williams,	Coburn,	0	0	0	0	0	2	0	0	4	0	10	8
7	J. L. McWilliams,	Slate Run,	0	0	0	3	3	0	6	0	4	0	25	4
8	Chas. H. Snyder,	Williamsport,	0	1	0	9	0	12	0	0	4	0	19	0
9	J. M. Hassinger,	Reedsville,	2	3	9	11	4	7	5	0	19	6	8	3
10	H. N. Leacock,	White Haven,	1	0	0	2	2	0	6	0	5	0	0	1
11	W. J. Bailor,	Gouldsboro,	2	0	0	6	0	0	2	0	0	0	0	0
12	J. S. Fenton,	R. F. D. No. 1, Canton,	4	0	0	3	3	20	2	4	5	0	0	0
13	F. W. Carpenter,	Jamison City,	4	0	2	13	6	2	10	0	5	0	0	0
14	S. A. Shaffer,	Emporium,	2	0	4	9	4	5	6	0	5	0	20	0
15	Harry VanCleve,	Conrad,	0	2	5	11	0	6	0	1	3	4	30	6
16	Stephen C. Baker,	Asaph,	0	0	0	0	0	4	3	3	3	0	0	0
17	Samuel J. Nelson,	Sizerville,	0	0	0	0	0	0	0	0	0	0	0	0
18	B. E. Kauffman,	Mattawanna,	2	0	0	6	0	15	1	0	0	0	20	0
19	A. M. Hettshelmer,	R. F. D. No. 1, Noxen,	0	0	0	50	0	10	0	0	0	0	0	0
20	Wm. F. Rawlings,	Rainsburg,	0	5	0	2	0	5	0	0	4	0	7	0
21	J. A. Bretz,	Lykens,	1	2	0	5	0	0	0	0	0	0	39	0
22	S. E. Osenbaugh,	Millmont,	5	6	3	20	10	7	12	1	6	2	30	10
23	J. R. Bumgardner,	Trough Creek,	0	0	0	3	2	0	0	0	0	2	0	0
24	John H. Gulton,	Muzette,	31	39	36	183	42	182	58	27	94	24	252	44

NOTE.—This record does not include crows killed through the use of poisoned corn or countless animals classed as vermin destroyed and not found by the several keepers.

STATEMENT BY MONTHS OF BOUNTY CLAIMS ALLOWED
ON NOXIOUS ANIMALS FROM DECEMBER 1, 1918, TO
NOVEMBER 30, 1919, INCLUSIVE.

Month.	Wildeat.	Fox.		Mink.	Weasel.	Amount.
		Grey.	Red.			
December, -----	84	465	618	1,306	4,525	\$8,501
January, -----	140	1,211	1,416	1,521	6,818	14,483
February, -----	67	1,001	921	911	4,418	9,575
March, -----	84	1,072	681	814	4,444	9,268
April, -----	18	238	211	218	1,975	3,199
May, -----	19	82	88	46	1,015	1,515
June, -----	3	76	67	26	1,301	2,052
July, -----	2	33	39	39	1,660	3,147
August, -----	5	27	19	39	1,778	3,436
September, -----	1	28	17	54	1,537	3,025
October, -----	8	51	26	32	1,858	3,758
November, -----	11	190	143	183	3,296	7,345
Total, -----	442	4,474	4,246	5,189	34,625	\$69,254
Recertified claims paid by this Department, -----						36
Grand total, -----						\$69,290

SUMMARY SHEET OF BOUNTY CLAIMS ALLOWED ON NOX-
IOUS ANIMALS DURING THE YEAR OF DECEMBER 1ST,
1918, TO NOVEMBER 30TH, 1919, INCLUSIVE.

	Wildeat.	Fox.		Mink.	Weasel.	Dollars.
		Grey.	Red.			
Adams, -----	0	105	4	16	532	924
Allegheny, -----	0	16	2	7	152	249
Armstrong, -----	2	19	12	123	781	1,233
Beaver, -----	0	3	18	51	63	162
Bedford, -----	?	29	96	147	884	2,149
Berks, -----	1	36	48	26	512	911
Blair, -----	1	62	86	54	299	768
Bradford, -----	10	167	183	217	1,451	2,594
Bucks, -----	0	70	17	30	605	1,014
Butler, -----	0	0	24	140	1,256	2,084
Cambria, -----	0	71	69	143	357	873
Cameron, -----	24	16	40	33	95	407
Carbon, -----	4	18	9	17	111	249
Centre, -----	14	159	206	44	634	1,699
Chester, -----	0	12	15	47	434	627
Clarion, -----	2	4	87	155	976	1,819
Clearfield, -----	7	62	134	145	775	1,572
Clinton, -----	38	133	103	19	174	942
Columbia, -----	7	47	19	76	605	1,130
Crawford, -----	2	4	23	279	1,479	2,284
Cumberland, -----	4	108	13	6	466	874
Dauphin, -----	0	91	15	2	307	642
Delaware, -----	0	0	0	0	23	30
Elk, -----	29	27	88	83	362	900
Erie, -----	0	0	31	311	1,228	1,945
Fayette, -----	13	132	33	56	267	723
Forest, -----	11	2	147	104	300	792
Franklin, -----	2	189	24	12	483	1,122
Fulton, -----	4	143	11	95	278	769
Greene, -----	0	0	4	3	107	138
Huntingdon, -----	9	267	81	56	525	1,458
Indiana, -----	1	62	15	171	725	1,223
Jefferson, -----	10	9	108	161	807	1,546
Juniata, -----	16	99	21	16	261	724
Lackawanna, -----	3	54	50	71	245	590
Lancaster, -----	0	14	10	9	494	709

SUMMARY SHEET OF BOUNTY CLAIMS ALLOWED ON NOXIOUS ANIMALS DURING THE YEAR OF DECEMBER 1ST, 1918, TO NOVEMBER 30TH, 1919, INCLUSIVE—Concluded.

	Wildcat.	Fox.		Mink.	Weasel.	Dollars.
		Grey.	Red.			
Lawrence, -----	6	13	12	32	315	464
Lebanon, -----	6	10	10	3	165	255
Lehigh, -----	0	14	9	9	276	419
Luzerne, -----	8	112	44	92	807	1,495
Lycoming, -----	21	108	170	87	735	1,677
McKean, -----	19	14	176	153	1,186	1,950
Mercer, -----	0	0	3	163	846	1,317
Mifflin, -----	5	158	83	48	265	918
Monroe, -----	14	50	76	128	475	1,054
Montgomery, -----	0	19	3	6	298	424
Montour, -----	0	2	0	0	149	183
Northampton, -----	1	31	5	21	199	362
Northumberland, -----	1	46	3	8	289	536
Perry, -----	5	147	33	8	518	1,109
Philadelphia, -----	0	0	0	0	3	4
Pike, -----	31	96	73	63	159	755
Potter, -----	39	23	261	98	1,116	2,110
Schuylkill, -----	1	115	23	34	371	805
Snyder, -----	1	43	47	10	372	776
Somerset, -----	1	227	107	226	533	1,619
Sullivan, -----	9	29	138	85	345	827
Susquehanna, -----	2	228	140	131	670	1,639
Tioga, -----	16	69	252	95	826	1,749
Union, -----	3	33	22	17	122	300
Venango, -----	1	5	91	141	738	1,296
Warren, -----	13	11	190	234	1,109	1,955
Washington, -----	0	3	55	18	175	343
Wayne, -----	16	111	197	143	583	1,491
Westmoreland, -----	4	139	67	117	525	1,235
Wyoming, -----	14	162	68	79	485	1,053
York, -----	0	36	42	5	857	1,305
Re-certified claims paid by this Department, -----	442	4,474	4,246	5,189	34,625	\$69,254
Grand total, -----						36
						\$69,290

FINANCIAL STATEMENT.

Covering period from December 1st, 1918, to November 30, 1919, Inclusive.

GAME PROTECTION AND PROPAGATING FUND:

Balance in State Treasury Dec. 1st, 1918, \$293,451 06

DEPOSITS:

One-half net revenue from Resident Hunters' Licenses placed in this fund during above fiscal year, ... \$176,130 98
 Revenue from Non-Resident Hunters' Licenses deposited in this fund, 7,026 90
 Portion of penalties, costs, etc., deposited with this fund as provided by law, 18,235 98
 Total, \$201,393 86

DISBURSEMENTS:

Salaries of Game Protectors, including general office force, \$87,304 64
 Expenses of Game Protectors etc., 61,713 81
 Salaries and expenses of Special Deputy Game Protectors employed during the open season, 12,741 78
 Salaries of Game Preserve Keepers, 20,157 50
 Expenses of Game Preserve Keepers, purchase and erection of telephones, buildings, supplies, etc., for twenty-four preserves, 16,907 03
 Game purchased and distributed, 28,115 60
 Grain and feed purchased for feeding game, 3,658 42
 Expenses in caring for game, 783 03
 Expressage on game, etc., 4,208 53
 Advertising the closing of counties, 469 59
 Bounties paid on dogs killed while chasing deer, .. 185 00
 Attorney fees, 317 00
 Postage, 1,207 80
 Purchase of automobiles and accessories, upkeep of automobiles and purchase and upkeep of motor boats, 11,702 06
 One-third compilation of Game, Fish and Forestry Laws, 100 00
 Miscellaneous, 791 18
 Money in bank, 81 06
 Total, \$250,444 03

Balance in this fund November 30th, 1919, \$244,400 89

NOTE: It will be noted that there is a difference between the above distribution and the amount given in the quarterly statement of our books attached. This is because a portion of our funds were drawn by direct requisition, while the amounts appearing in the quarterly statement cover only advancements for which settlement is later made with the Auditor General.

BOUNTY FUND:

Balance in Bounty Fund on December 1st 1918, \$265,779 84

DEPOSITS:

One-half net revenue from Resident Hunters' Licenses placed in this fund during the fiscal year, \$176,130 98
 Portion of penalties, costs, etc., deposited with this fund as provided for by law, 10,465 08
 Re-deposits of checks sent out by State Treasurer and returned undelivered, 313 00
186,909 06

Total, \$452,688 90

DISBURSEMENTS:

Bounties from December 1st, 1918, to November 30th, 1919, inclusive, per detailed list attached to this report, \$69,254 00
 Salaries, employees of Bounty Division, 5,530 32
 Additional amount paid during fiscal year in reimbursing counties for bounties paid under the Act of July 25th, 1913, audited and paid under the Act of June 19, 1917, (making a grand total paid for bounties during 1913, 1914 and a part of 1915 of \$287,465.00), 1,906 50
 Postage, 1,424 20
 Signagraph, for use in signing Bounty checks, 250 00
78,365 02

Balance in this fund November 30th, 1919, \$374,323 88

NOTE: The balances as of November 30th, 1919, given in the Game Protection and Propagation Fund and the Bounty Fund may differ slightly from the balances appearing on the books of the State Treasurer on the same date because of vouchers in course of settlement.

QUARTERLY STATEMENT.

December 1st, 1918 to February 28th, 1919.

DR.

To balances from last quarter, \$4,186 23
 To warrants on appropriation, 28,000 00
 To penalties and costs collected, 11,607 79
 To proceeds of guns sold, 333 00
 To proceeds of taxidermists' licenses, 37 00
 To proceeds of ferret owners' licenses, 14 00
 To proceeds of propagating licenses, 9 00
 To proceeds of ordinary licenses, 1 00
 To proceeds of Special licenses, 3 00
\$44,191 02

CR.

By deposits in State Treasury, \$12,004 79
 By expenses during quarter, 25,490 25
37,495 04

Balance, March 1st, 1919, \$6,695 98

March 1st, to May 31st, 1919.

DR.

To balance from last quarter, \$6,695 98
 To warrants on appropriation, 19,000 00
 To penalties and costs collected, 12,662 13
 To proceeds of guns sold, 669 75
 To proceeds of taxidermists' licenses, 15 00
 To proceeds of propagating licenses, 5 00
 To proceeds of ferret owners' licenses, 4 00
 To proceeds of ordinary licenses, 3 00
 To proceeds of special licenses, 2 00
\$39,056 86

CR.

By deposits in State Treasury, \$13,360 88
 By expenses during quarter, 19,595 91
32,956 79

Balance June 1st, 1919, \$6,100 07

June 1st to August 31st, 1919.

DR.

To balance from last quarter, \$6,100 07
 To warrants on appropriation, 19,500 00
 To penalties and costs collected, 8,652 77
 To proceeds of guns sold, 268 50
 To proceeds of taxidermists' licenses, 6 00
 To proceeds of ferret owners' licenses, 5 00
 To proceeds of propagating licenses, 3 00
\$34,535 34

CR.

By deposits in State Treasury, \$8,935 27
 By expenses during quarter, 20,315 97
29,251 24

Balance, September 1st, 1919, \$5,284 10

September 1st to November 30th, 1919.

DR.

To balance from last quarter, \$5,284 10
 To warrants on appropriation, 24,500 00
 To penalties and costs collected, 13,667 24
 To proceeds of guns sold, 318 75
 To proceeds of taxidermists' licenses, 47 00
 To proceeds of ferret owners' licenses, 25 00
 To proceeds of propagating licenses, 7 00
 To proceeds of non-resident licenses, 220 00
\$44,119 09

CR.

By deposits in State Treasury, \$14,334 99
 By expenses during quarter, 25,882 72
40,217 71

Balance, December 1st, 1919, \$3,901 38

Respectfully submitted,

SETH E. GORDON,

Acting Secretary, Game Commission.

ADDENDUM.

Harrisburg, Pa., January 7, 1920.

As a matter of information we give below data covering game killed and hunting accidents during the hunting season of 1919, also data available to date covering the number of Resident and Non-Resident Hunters' Licenses issued for 1919. All of this data has been perfected since the drawing of my report to the Game Commission. Attention is called to the fact that the final returns from County Treasurers covering licenses issued in 1919 have not been completed and the complete final returns may somewhat increase the figures given, but it is believed that the data below given on game killed and hunting accidents is authentic and as complete as it is possible to secure same. I am confident the figures on game killed are in each case below the actual kill, as there are a number of game birds and animals killed of which our representatives obtain no knowledge.

GAME KILLED SEASON OF 1919.

Number.	Kind.	Estimated Weight of Each.	Total Weight.
2,913	Legal male deer, -----	130 lbs.	378,690 lbs.
472	Bear, -----	200 lbs.	94,400 lbs.
2,719,879	Rabbits, -----	2 lbs.	5,439,758 lbs.
439,106	Squirrels, -----	1 lb.	439,106 lbs.
34,036	Raccoons, -----	8 lbs.	272,288 lbs.
5,181	Wild turkeys, -----	12½ lbs.	64,762 lbs.
287,001	Ruffed grouse, -----	1½ lbs.	430,501 lbs.
15,658	Ring-neck pheasants, -----	3 lbs.	46,974 lbs.
46,319	Virginia quail, -----	6 oz.	17,369 lbs.
575	Hungarian quail, or partridge, -----	10 oz.	359 lbs.
27,766	Woodcock, -----	6 oz.	10,413 lbs.
28,714	Wild waterfowl, -----	2 lbs.	57,428 lbs.
	Total weight, -----		7,252,048 lbs.
	Reduced to tons, equals, -----		3,626 tons

The above does not include 23,786 shore birds of various kinds nor 175,000 blackbirds killed. There were also 119 male fawns and 207 doe deer illegally killed during the season.

HUNTING ACCIDENTS.

	1915	1916	1917	1918	1919
Fatal accidents, -----	29	26	26	19	35
Non-fatal accidents, -----	119	102	75	45	128

HUNTING LICENSES ISSUED.

	1915	1916	1917	1918	1919 (As of Jan. 6, 1920)
Resident, -----	262,355	290,422	315,474	311,290	393,697
Non-Resident, -----	532	632	568	478	1,128

Respectfully submitted,

SETH E. GORDON,

Acting Secretary, Game Commission.



